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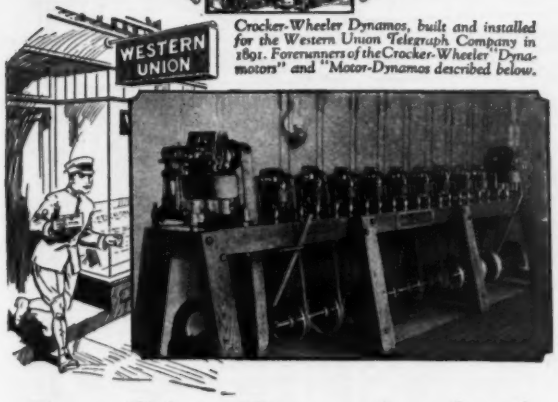

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PAPER TRADE JOURNAL

ESTABLISHED 1872

THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY AND THE PIONEER PUBLICATION IN ITS FIELD

FIFTY-THIRD YEAR

Published Every Thursday by the
LOCKWOOD TRADE JOURNAL CO., INC.

LESLIE R. PALME' PRESIDENT — GEO. S. MACDONALD VICE-PRESIDENT & TREAS — F. K. HOPPIE SECRETARY

10 EAST 39TH ST. N.Y. U. S. A

TABLE OF CONTENTS

Copyright, 1925, by Lockwood Trade Journal Co., Inc.

Secretary of Labor Davis Meets Box Board Men 27
Quebec Legislature Hears Views on Embargo 28
Pulp and Paper Association Meetings 28
Philadelphia Trade Shows Betterment 29
Coarse Paper Shows Broadening Demand 29
Federal Reserve Report on Employment 29
Wholesale Waste Merchants Banquet 29
Paper Men in Spring Street Opening 29
S. S. Garrett Adds Die Wiping Line 29
Paper Demand in Toronto Improving 30
Spanish River Directors Meet 30
Canada Waxed Papers Kept Busy 30
Mattagami Paper Co Has Active Year 30
OBITUARY 32
M. W. Smith Now With Orr Felt & Blanket Co. 32
A. H. Seyler Goes With Cleveland Mfg. Co. 32
Accept Two Resignations 32
Yellow Pine and Brown Mill Consolidated Sales 32
New York Trade Jottings 34
Continental Salesmen Meet at St. Louis 34
News of the Baltimore Trade 34
H. E. Tidmarsh Goes With Baker Mfg. Co. 34
Paper and Paper Stock Imports for November 36
News of the Los Angeles Trade 36
Paper and Paper Stock Imports for November 38
Against Freight Increases in Albany District 38
EDITORIAL 40
Pacific Coast Paper Concerns Merge 41
Mr. Carter Reports to Congress on Paper 41
Protest Classification on Imitation Parchment 41
TECHNICAL SECTION 43
COST SECTION 53
Bids and Awards for Government Paper 58
Imports of Paper and Paper Stock 60
Spanish River President Gives Banquet 62
MARKET QUOTATIONS 64
NEW YORK MARKET REVIEW 66
Fraser Companies New Plant 66
Allied Paper Mills to Make Change in Stock 66
MISCELLANEOUS MARKETS 68
Ernest G. Snow Co. Creditors to Meet 68
Fort Worth to Have Large Paper Box Factory 68

Want and For Sale Advertisements, Pages 70, 71, 72 & 73

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PAPER TRADE JOURNAL

Vol. LXXX. No. 4 NEW YORK AND CHICAGO Thursday, January 22, 1925

SECRETARY OF LABOR DAVIS MEETS BOX BOARD MEN

At Well Attended Meeting In Washington Tells Representative Manufacturers That Considerable Progress Has Been Made Through Government Co-operation in Eliminating Seven Day Week in This Branch of the Paper Industry—George Gair of New York States That the Plan Is Still Meeting With Considerable Opposition From Some Manufacturers

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., January 21, 1925.—To further the elimination of the eleven and thirteen hour day and the seven day week in the box board plants of the United States was the purpose of the conference held here last week between the box board manufacturers and Secretary of Labor, Davis, in answer to a call of the Secretary. The meeting was well attended.

Box Board Manufacturers Association Meets

Previous to the conference the regular monthly meeting of the Box Board Manufacturers Association was held at which routine business was discussed according to Secretary Mauff of the association. In the evening a banquet was held at which were present Secretary of Labor Davis, Assistant Secretary of Labor Henning; Commissioner of Labor Statistics, Ethelburt Stewart; Judge Van Fleet, chairman of the Federal Trade Commission; Nelson B. Gaskill, Federal Trade Commissioner and others. A number of impromptu talks were made.

Secretary of Labor Davis Speaks

"I am glad to welcome the representatives of the box board industry to another conference to further the elimination of the eleven and thirteen hour day and the seven day week in the plants manufacturing box board in the United States," said Secretary of Labor, Davis, in opening the conference and he continues:

"For nearly a year we have been struggling with this problem, and I am gratified with the progress which has been made in the direction of instituting the three-tour workday and the six-day work week, in many of our box board plants. But it is time that we came to a thorough understanding with each other. Today the majority of employees in our box board plants, are working a three-tour day and a six-day week, and the bulk of our box board output is being manufactured under this humanitarian system of employment. But there are a few manufacturers who have failed to see the necessity for progress, who are not in accord with our humanitarian purpose, who have failed to catch the spirit of the times. Those who are still living and working in the past must bring themselves up-to-date, must be shown the true way to progress and prosperity by the progressive men among you.

"In looking over the results of our movement to date I find that most of the plants which still cling to the antiquated, obsolete eleven and thirteen hour day and the seven-day week are located in states whose laws expressly forbid Sunday work. They are violating not only the moral obligations which our enlightened age imposes upon every man who buys the labor of his fellow man, but the laws of the land as established by their duly elected representatives.

"Now I cannot, by reason of the pressure of the public business, continue indefinitely to attend these monthly conferences of the box board industry. This is your problem. You represent a great industry. You are upstanding, energetic, self-reliant business men. You are the type of men who throughout our American life justly pride themselves on getting things done. I believe that you have the energy and the ability to get this thing done—done promptly and thoroughly.

Correct Solution Not Difficult

"It ought to be possible for you to face this issue and reach the correct solution without further prompting or urging by any government official. You have the necessary information and the means to accomplish the desired end. A firm policy and loyal cooperation among yourselves will get results, and will avoid the necessity for either legislative or administration by federal or state government authorities. You have before you the example of the great steel industry, with its vast extent and its complicated organization. After a single conference with the President of the United States, the representatives of that tremendous industry promptly and effectively began the elimination of the twelve hour day and the seven day week. They realized that the heart-breaking twelve hour day and the seven-day week in that great industry were against public policy. And they realized that what is against public policy is bad business policy. As a result the 12-hour day and the seven-day week is practically eliminated in our basic steel industry. 'Go thou and do likewise'

"This matter is in your hands. You must achieve your purpose for the honor of your industry, and for its continued prosperity. I am confident that you have the honesty of purpose, the integrity, the ability and the energy to put an end to working conditions which are out of tune with our whole industrial structure today. You will have my earnest cooperation in every step you may take to establish humanity in industry."

There was considerable discussion from the floor of the conference in connection with the labor conditions in the industry. Secretary Davis said that reports which he has indicate that fully 75 per cent of the box board mills are complying with the agreements made at the last conference held here. Some of those who agreed to the conditions at the last conference, he said, have gone back on their word, while others who did not think that they could change from the two to three tours have done so. He urged the manufacturers present to try and bring all of the manufacturers in line within the next six months if possible.

Proposition Still Meets Opposition

George Gair stated that in his opinion the minority manufacturers are opposing the proposition more now than they did in the first instance and they will have to be brought into line.

W. I. Osborn, of the Cornell Wood Product Company reported

(*Continued on page* 32)

QUEBEC LEGISLATURE HEARS VIEWS ON FEDERAL EMBARGO

Premier Taschereau Expresses Himself on That Suject as Well as on Exportation of Power—Program for Annual Meeting of Canadian Pulp and Paper Association—Laurentide Shareholders to Consider Issuing of General Mortgage Sinking Fund Gold Bonds—Fraser Companies, Ltd., Expected to Start Work on New Plant at Madawaska, Me., in the Early Spring.

[FROM OUR REGULAR CORRESPONDENT.]

MONTREAL, Que., January 19, 1925.—Pronouncements of considerable importance to the pulp and paper industry were made in the Quebec Legislature during the past week by Premier Taschereau. The first was in connection with the exportation of water power. Premier Taschereau maintains that the water powers and other natural resources come within the absolute jurisdiction of the provinces and that, therefore, it is within the power of the provinces to prohibit exportation of power. The Federal Government, on the other hand, maintains that all questions of import and export are within the exclusive jurisdiction of the Federal authorities and that, therefore, they can grant licenses for the export of power. Premier Taschereau, in his statement said that in Quebec public opinion was unfavorable to the exportation of power and that the demand may soon be such that the Provincial Government may be unable to refuse to prohibit such exportation. He added:

"The question of jurisdiction is far from being determined. But, outside of the fact that I believe that the provinces are masters of their natural resources and their soil, it is a very difficult matter for the federal power to regulate such matters, necessarily in a general way, when such a provision might suit one province and be disastrous for another. In my opinion, it is absolutely necessary to define the rights of the two authorities, provincial and federal."

Premier Taschereau proceeded to apply the same argument to the proposed Federal embargo on pulpwood, but here his argument had an opposite direction. He maintained that prohibition of the export of pulpwood by the Federal authorities might be prejudicial to the province of Quebec and that the latter would claim freedom of action in the marketing of its natural resources. He proceeded as follows:—

"The exportation of wood to the United States raises a problem equally grave to that of the export of electrical energy. A federal commission which toured Canada from one end to the other studied this thorny problem and made very laudable effort to aid in its solution. Clearly we have a vital interest in manufacturing our wood at home. Is it possible to keep it all?

"It is claimed that if the embargo is extended to cover all the wood cut is would mean that the colonists and farmers would get lower prices for their wood, that they would be at the mercy of Canadian mills, since the latter would not have to face American competition. It is added, furthermore, that those who hold full title to a forest should have the right to dispose of the wood in the best market. It is further claimed that American companies have paid, and dearly, for forest areas at a time when no embargo existed, and that in such cases it would be a violation of acquired rights to impose an embargo. All these objections are serious, and cannot be lightly laid aside.

"My idea is to submit to the House and to public opinion at the commencement of the session these two vital questions. I hope they will give rise to thoughtful discussions, and that, all working together in the best of goodwill, we may find a solution. I know of no problems at present which so deeply affect the very life of the future development of our province."

Pulp and Paper Association's Meeting

E. W. Beatty, K. C., President of the Canadian Pacific Railway, will be the chief speaker at the annual luncheon of the Canadian Pulp and Paper Association, in Montreal, on Friday, January 30. The usual dinner will be held in the evening, but the list of speakers for this dinner has not yet been definitely arranged. The annual meeting of this Association will extend for three days, January 28 to January 30 inclusive, and will be held in the Ritz-Carlton Hotel, Montreal, under the presidency of George Carruthers. The program will be as follows:—

Wednesday, January 28: 10 a. m., Technical section: Reading of minutes; chairman's annual report; report of secretary-treasurer; reports of the standing committees on education, apprenticeship, chemical and physical standards and abstracts and publications; appointment of committee on nominations and a paper by E. P. Cameron, chief, pulp and paper division, F. P. L., Montreal, on "The Division of Pulp and Paper of the Forest Products Laboratories of Canada; Its Equipment and Work." 2.30 p. m.: A paper by A. J. T. Taylor, M.E., president and managing director of the Combustion Engineering Corporation, Limited, Toronto, on "Steam, Storage and Accumulators," illustrated; a paper by Dr. E. A. Rees, manager research service, F. C. Huyck and Sons, Kenwood Wool Products, Albany, N. Y., on "Further Research in Press Rolls and Pressing"; and a paper by Miss Louise E. McGrath, chief chemist, Booth Chemical Co., Townley, N. J., on "White Water Coagulation."

Thursday, January 29, 10 a. m., Technical section; vice-regal suite of the Ritz-Carlton, a paper by C. A. Waterous, assistant manager, Waterous Engine Works Company, Limited, Brantford, Ont., on "Some New Developments in Continuous Pulp Grinders," illustrated; a paper by E. D. Walen, assistant to the agent, Pacific Mills, Lawrence, Mass. on "Study of the Failure of Dryer Felts"; a paper by A. J. T. Taylor, on "The Drying of Wood Refuse."

Woodlands section, Blue Room, Ritz-Carlton Hotel, reading of minutes; chairman's annual report; secretary's annual report; reports of committees; a paper by H: G. Sanche, Abitibi Company, Limited, on "Determining Jobbers' Costs"; a paper by G. E. Brown, Laurentide Company, Limited, on "Cutting the Cost of Transportating Provisions"; a paper by F. T. Jenkins, James D. Lacey and Company (Canada) (Limited), Montreal, on "Sketching from the Air"; a paper by Alex. White, Ontario Board of Health, on "Health Work in Lumber Camps"; election of officers.

The felt section will meet during the morning in the Drummond Building. The board section will also meet in the association rooms.

1 p. m.—Special luncheon given by the technical and woodlands section in the Ballroom of the Ritz-Carlton.

2:30 p. m.—Technical and woodlands sections, vice-regal suite, Ritz-Carlton Hotel; discussion on "Are our raw materials costing us too much and have we reached the maximum of efficiency in their utilization?" Book and writing section, Association rooms; tissue paper section, Association rooms.

4 p. m.—Mechanical pulp section, Green Room, Ritz-Carlton Hotel.

9 p. m.—Informal smoker in the Ballroom of the Ritz-Carlton.

Friday, January 30, 10 a. m.—Annual meetings of the whole association in the Vice-Regal suite of the Ritz-Carlton; minutes; president's annual address; reports of sections as follows: board section, book and writing, chemical pulp, coated paper, felt, kraft pulp, mechanical pulp, news print, technical, tissue paper, waxed paper, woodlands, wrapping paper; secretary's financial report; report of committee on industrial research; report of committee on education; proposed amendment of by-law IV.; new business; election of president.

1 p. m.—Annual luncheon; address by E. W. Beatty, president, Canadian Pacific Railway.

2:30 p. m.—Coated paper section, Green Room.

(*Continued on page* 66)

PHILADELPHIA PAPER TRADE SHOWS GENERAL BETTERMENT

Fine Papers Having Steady Demand While Coarse Papers Are Showing Improvement—At Least 700 Expected to Attend Banquet of Wholesale Waste Merchants—Fine Paper Men Discuss Sales Instruction Lessons to Be Given By Typothetæ—Sylvester S. Garrett Adds Die Wiping Paper to Line—Creditors of Ernest G. Snow Co. to Meet on January 27.

[FROM OUR REGULAR CORRESPONDENT.]

PHILADELPHIA, Pa., January 19, 1925.—The distribution of paper in the Quaker City and the territory which the local dealers cover is keeping abreast with the betterment noted in the general industrial world. While there is no sudden spurt in the general business situation there is actual evidence of its advent in the initial orders for all grades of commodities now being placed and more frequent inquiries.

All grades of fine papers have been moving in a fairly steady market with the printing, stationery and publishing industries the chief sources of consumption. There also is a larger volume of paper specialties used in the advertising field moving along with the standard grades of books, covers, writings and bonds. Broadsides, announcements newsprint and other specialties used in the commercial world for the promotion of business through advertising have been among the more active stocks in the warehouses in these early days of 1925.

Coarse Papers Broadening in Demand

Industries particularly identified with the manufacturing establishments of Philadelphia and which have been the source of its commercial fame for many generations are on in the market for all grades of coarse papers. The demand from the textile, hardware, knitted goods and other large enterprises are more generous. They are consumers of Krafts, manilas, fibers and coarse specialties adapted for their individual needs. Large volume of orders have been purchased in these first weeks of the new year and, judging from present inquiries, there will be expansion of shipments as the days advance. The reports of business in the coarse paper division are even more optimistic than those in the fine paper and the sales organizations are reporting brighter prospects in all the industries with which they come in contact.

Federal Reserve Report On Employment and Wages

In its report on the employment and wages in the Pennsylvania State territory, the Federal Reserve Bank for the Third or Philadelphia District shows in its December Survey as compared with November an increase of 0.3 per cent in the employment situation and a total wage increase of 0.5 per cent with an average wage increase of 0.3 per cent in the 12 plants reporting from the pulp and paper industry. In the New Jersey district which comes under the Federal Reserve survey for its District there was shown, in the nine plants reporting, a decrease in employment of 1.8 per cent with no increase in the general wage schedule but with an average wage increase 1.9 per cent. It also showed that the improved conditions, reflected in the paper trade, by the printing and publishing business gave the larger increase of 7.6 per cent in its employment but a decrease in the average wages of 10.6 per cent for New Jersey and a decrease of 1.5 per cent for Pennsylvania in employment with an average wage increase of 4.3 per cent.

Wholesale Waste Merchants Banquet

Judging from the large number of acceptances being received for the annual banquet of the Philadelphia Wholesale Waste Merchants Association, to be held on February 12. The affair will be a great success. More than 2,000 invitations have been sent out. From the advance replies to the invitations indications are that there will be at least 700 present. The Committee in Charge of Arrangements has completed its program of entertainment chiefly of a social nature with but very few addresses and those to be of a brief character from the President, Evan J. Badger and others prominent in trade circles. Besides the paper trade associates the Association comprises the metal and rag divisions.

Comments On Typothetae School

Practical benefits to be derived from the series of lessons which the Philadelphia Typothetæ will give to the members of the sales organizations of the various paper houses were discussed at the monthly meeting of the Fine Paper Division of the Philadelphia Paper Trade Association held last Thursday in the Bourse Restaurant. During the meeting Secretary Howard Sattherwaithe of the Paper Association gave an outline of the work of the Typothetæ School and its relation to the paper industry and the beneficial results which could be obtained by the patronage of the paper dealers. He urged the paper dealers to keep alive the interest of the salesmen in the newly inaugurated classes which will be held every Monday evening by the Typothetæ for the paper salesmen. The first of the series of lessons was given two weeks ago when more than 79 members of the Philadelphia Paper Trade sales forces joined with the printing association in the enrollment among the classes to be held for ten consecutive Mondays. He told of the present progress and expressed gratification over the initial enrollment. Secretary Sattherwaithe expressed the appreciation of the paper men for the co-operation which the Typothetæ had shown in granting the request of Norbert A. Considine, of the Paper House of Pennsylvania and establishing the School so that the salesmen might learn the technical side of the printing trades and its relation to paper for the purpose of promoting their sales ability. The meeting was under the direction of Chairman William S. Wilcox, who acted in behalf of his firm, the Wilcox, Walter, Furlong Company, as host. The Fine Paper Division will, at its next meeting on Thursday, January 29, receive from the Trade Relation Committee of which Norbert A. Considine is Chairman a report of its conference with the Trades Relation Committee of the Typothetæ of Philadelphia on the question of the revised Trades Custom relating to the broken package which recently has been the source of much concern for both the paper men and their allied industries.

Paper Men In Spring Street Opening

It was quite appropriate that in the recent ceremonies attending the opening of the extension of Spring Garden street that the paper trade should play a leading part in the program which the City Government held in conjunction with that event for, through its linking with the main arteries of traffic to the Philadelphia Camden Bridge, the section of the city in which is located Paper Row, will be directly connected with the span across the Delaware. Among the most active leaders in the parade and other displays made during the ceremonies was Walter P. Miller of the Crescent Corrugated Paper Products Company, who as President of the Spring Garden Business Men's Association, led the procession with Mayor Kendrick of Philadelphia.

S. S. Garrett Adds Die Wiping Line

A die wiping paper has been developed by Sylvester S. Garrett, 259 S. 3rd street, who has placed the new product on the market under his own brand, the Wissahickon. The Garrett company, of which he is head, has added the new product to its line of coarse papers. It was developed, after experimentation, along the special qualifications of tensile strength, quick absorption and smooth texture. It has been especially manufactured for the Garrett distribution and is sold in bulk quantities from the mills. The rolls run from 2 to 9½ inches. This is the first time that the Garrett com-

(Continued on page 68)

PAPER DEMAND IN TORONTO IS SHOWING IMPROVEMENT

Conditions in Paper Lines Generally Are Growing More Encouraging—Rag and Paper Stock Market is Firmer with Advances in Some Lines—Funeral of Late L. H. Gardner, President of Garden City Paper Mills Co., Ltd., Is Largely Attended—T. L. Crossley of the Vocational Education Committee Lectures on Technology of Pulp and Paper at University of Toronto

[FROM OUR REGULAR CORRESPONDENT.]

TORONTO, Ont., January 19, 1925.—Paper conditions are improving. The general tone of business is brightening as the months pass and collections are better. Printers are figuring on more catalogues and printed matter for the coming year which, it is expected, will result in good orders. Envelope factories, which were running to about seventy-five per cent capacity during the past three months, report that commercial envelopes are now being ordered in larger quantities. Manufacturing stationers are fairly well employed and there has been considerable pick up in the wrapping paper trade. Business generally so far appears to be stronger in the country towns and cities than in the larger centres of population. Book and writing mills are operating to about three-quarter capacity while specialty and coated paper plants report an important outlook.

On the whole, last year was better than many firms thought and will be revealed in the financial statements which will be presented at the annual meetings of the various wholesale and manufacturing companies which will be held during the latter part of this and next month. Waste paper merchants report that the market is firmer. White blank news, soft white book shavings, manilas, news and scrap prices have advanced all the way from ten cents to twenty-five. Quotations on white shirt cuttings are about the same although the demand is not quite as good as in December. Rag and paper stock dealers on the whole look for a better year than last.

Advocates Wrapped Loaf of Bread

Dr. Hastings, medical health officer of Toronto, says that only one per cent of the bread sold in Toronto is wrapped and what bread is sealed commands a cent more a loaf. He strongly advocates the sanitary, wrapped loaf and would like to see civic legislation passed to that effect, but the bakers declare that the people will not pay the extra cost for the work and demand the unwrapped product. The sealed loaf is not sold nearly to the same extent as a few years ago when times were better and citizens spent their money more freely.

New Tenders Will Be Sought

The Ontario government will seek new tenders for the sale of burned and damaged timber covering an area of 216 square miles in the Mississauga Forest Reserve in the district of Algoma. There are considerable quantities of pine and cedar on the area and two bids were received when this part of the district was advertised some months ago but both were without the marked check required by the regulations governing the sale. The Department of Lands and Forests has been negotiating for some time for a correction of this omission but has now decided to place the area on the market for the second time.

Many Attend Mr. Gardner's Funeral

The funeral of L. H. Gardner, President of the Garden City Paper Mills Company, St. Catharines, who passed away recently took place on Tuesday last, and was largely attended. The pall bearers were Charles V. Syrett, Toronto, W. H. Howe, Buffalo, and R. E. Myers, Rochester, directors of the company. Ed Burgess, superintendent of No. 1 mill, St. Catharines, Fred Hill and Richard Carroll, representing the employees of the company. The floral tokens were numerous and beautiful. Mr. Gardner, along with the late R. M. Myers of Rochester, was the founder of the L. H. Gardner Paper Company, Mumford, N. Y. in which he disposed of his interests some years ago, after coming to St. Catharines to reside.

Spanish River Directors Meet

A meeting of the directors of the Spanish River Pulp and Paper Mills was held in Toronto during the past week. President George H. Mead, of Dayton, Ohio, was in attendance and it was stated that only routine business was transacted and that there was no reference to the much talked of merger of the Abitibi Power and Paper Company and the Spanish River Mills.

Lectures on Pulp and Paper

A course of lectures on the technology of pulp and paper is being given to fourth year students of the Faculties of Applied Science and Forestry, University of Toronto, by T. L. Crossley, of the Committee on Education of the Canadian Pulp and Paper Association.

Waxed Paper Co. Is Kept Busy

Canada Waxed Papers, 615 Yonge street, Toronto, which was established a few months ago by James MacArthur and George Courtenay, has made splendid progress and is catering to a large trade. The company last week made several heavy shipments and report that the outlook for the coming year is bright.

Envelope Company Suffers from Water

Fire started in the fifth floor of the Fremes building, corner of Peter and Adelaide streets, Toronto, and considerable damage was done by water to occupants on the lower flats. The 5 in 1 Envelope Company which occupied the fourth floor, suffered a ten thousand dollar loss from water and the Espie Printing Company also sustained considerable damage before the flames were extinguished.

Mattagami Co. Had Active Year

The Mattagami Pulp and Paper Company, Toronto, whose plant is located at Smooth Rock Falls, made, marketed and sold during the past year 52,000 tons of unbleached sulphite pulp and has none in stock at the present time while the output of the concern is sold up for the next three months. The operating capacity is 170 tons daily but on some days ran as high as 185 tons. The biggest single day's output during 1924 was 205 tons. The company has contracted for 125,000 cords of pulpwood for the coming year and this is now being unloaded at the plant at the rate of about fifty cars daily. Some 100,000 cords have been bought from the settlers and farmers in the district while the remaining 25,000 cords are being but off the company's own limits.

Notes and Jottings of the Industry

John Martin of the John Martin Paper Company, Winnipeg, and former president of the Canadian Paper Trade Association, spent a few days in Toronto during the past week on business.

S. B. Gundy, who is a widely known publisher of Toronto, has been unanimously elected president of the Toronto Board of Trade for the coming year.

J. S. Miller of the Mead Sales Company, Dayton, Ohio, was a visitor to the trade in Toronto during the past week.

Samuel Knobe representing the Albermarle Paper Company, Richmond, Va., manufacturers of blotting papers, was calling upon the trade here recently.

Charles F. Mansell, veteran paper salesman for the Howard Smith Paper Mills, Toronto, fell on the ice while leaving his residence and severely wrenched his shoulder, which confined him to the house for a few days.

George H. Allen, of the Buntin, Reid Company, wholesale paper dealers, Toronto, has returned from a month's visit to his old home in Ireland.

MATHIESON System

Measured Units of Liquid Chlorine

ACCURATE loading of containers is probably more important with Liquid Chlorine than with any other industrial chemical. Approximate net weights are not sufficient; they should be such that each container may act as a measured unit of Liquid Chlorine.

Accuracy of this sort is the keynote in the design and operation of the Mathieson Multi-Unit Tank Car. It is the basic feature by reason of which this car assures the maximum of safety, economy and convenience in the transportation and use of Liquid Chlorine.

Each of the fifteen one-ton containers is refilled at our Works while being *individually weighed* on a Toledo Scale. To make doubly sure of the accuracy of the contents, all containers are allowed to stand for 24 hours after filling, until the Liquid Chlorine has adjusted itself to atmospheric temperature. The weights are then re-checked before the containers are returned to the Multi-Unit Car.

Users of the Mathieson Multi-Unit Tank Car are assured of an even fifteen tons in each carload, each ton container a measured unit of Liquid Chlorine, with none of the hazard due to possible overloading and with no shortages or uncertainty as to the quantity of material received or on hand.

The MATHIESON ALKALI WORKS *Inc.*
25 WEST 43rd STREET NEW YORK CITY
PHILADELPHIA PROVIDENCE CHICAGO CHARLOTTE

Deal Direct with the Manufacturer

Bicarbonate of Soda
Liquid Chlorine-Caustic Soda

EAGLE THISTLE PRODUCTS

Sesquicarbonate of Soda
Bleaching Powder-Soda Ash

Obituary

Theodore Conrow

Theodore Conrow of 53 Montgomery pl., Brooklyn, president of the firm of Conrow Brothers, paper dealers, in Manhattan, and a well-known figure in many activities in this borough, died suddenly Tuesday at his home. He was born in Monroe St., Manhattan, Dec. 14, 1844, the son of Adam and Rachel Conover Conrow and attended the old Market Street Church in Manhattan during the pastorate of the Rev. Dr. Theodore L. Cuyler. On taking up his residence in Brooklyn he became one of the first members of the Memorial Presbyterian Church.

Mr. Conrow was one of the first members of the board of trustees of the Berkeley Institute and was a charter member of the Montauk Club. He was also a member of the Sons of the Revolution and the Lafayette Post, G. A. R. He had been connected with the paper industry for 60 years. He married Helen J. Stilwell in 1873. Mrs. Conrow died in July, 1924. Mr. Conrow is survived by two daughters, Effie C. Merwin, wife of Dr. Robert E. Merwin, and Helen C. Thurston, wife of Henry B. Thurston, of Upper Montclair, N. J., and three grandchildren. Funeral services were held Thursday afternoon at 2 o'clock, the Rev. John Barlow, pastor of the Memorial Presbyterian Church, officiating. Interment will be in Greenwood Cemetery.

Lauren H. Gardner

[FROM OUR REGULAR CORRESPONDENT.]

TORONTO, Ontario, January 17, 1925.—After being in poor health for the past three years, Lauren H. Gardner, widely-known paper manufacturer, died at his home in St. Catharines, Ont., in his 60th year. Durnig the last five months his malady assumed an acute turn and he was not able to attend regularly to business.

Mr. Garnder was president and founder of the Garden City Paper Mills, vice-president of the Canadian Vegetable Parchment Company, and a director of the Victoria Paper and Twine Company, Toronto. He was well known in the paper trade and held in high esteem. Born in Rochester, N. Y., he was connected with the Mumford Paper Mills, Mumford, N. Y., before coming to St. Catharines about 14 years ago where he was a public spirited citizen. He was an Anglican in religion.

Mr. Gardner is survived by his mother, Mrs. Virginia Gardner; his widow, Mrs. Lucretia A. Gardner and a niece, Mrs. Flora MacIntee, all of St. Catharines. Interment took place on January 14 in Rochester, N. Y.

Allcutt W. Mendenhall

[FROM OUR REGULAR CORRESPONDENT.]

KANSAS CITY, Mo., January 12, 1925.—A. W. Mendenhall & Co., wholesale paper merchants of this place, announce the death on the morning of January 5 of Allcutt W. Mendenhall, senior member of the firm. It is stated that the organization of the business is such that it will be continued as in the past.

MEETS BOX BOARD MEN

(*Continued from page 27*)

that the new time has been installed in his plant. He said that his plant had considerable difficulty in accomplishing the change but it has been made, he said. A representative of the Halltown Paper Mills stated that his firm has gone on a six day a week plan but that it cannot change from a two to three tour basis because of the peculiar labor conditions in the town.

Mr. Mahany, attorney for the Downington Paper Company sounded the only real discordant note when he asked the Secretary if the government would guarantee immunity against anti trust violations because of the agreement and he suggested that the agreement might lead one to believe that there was a suggestion of production curtailment and the raising of prices and the restraint of industry and trade.

No Curtailment Shown

Commissioner of Labor Statistics Stewart answering him pointed out that the figures do not show any curtailment since the change went into effect. He said that when he first started this movement he was threatened by an attorney of one of the box board manufacturers, but that he told him that he "would still be doing business at the same stand." There was some suggestion by Mr. Mahany that in order to work out this plan the manufacturers had to join the association. This was denied by both Mr. Stewart and the Secretary and Mr. Stewart stated that out of the 31 plants which are not cutting down their hours, 16 are members of the association.

Secretary Davis in answering Mr. Mahany, stated that he had not called the conference for humanitarian purposes as a guise only with the purpose of curtailment and raising the prices.

M. W. Smith Now With Orr Felt & Blanket Co.

[FROM OUR REGULAR CORRESPONDENT.]

PIQUA, Ohio, January 17, 1925.—M. W. Smith, formerly with the selling organization of A. L. de Olloqui handling the sales of the H. Waterbury & Sons of Oriskany, N. Y., severed connection with that company January 1 and is now with The Orr Felt and Blanket Company of Piqua, Ohio.

Mr. Smith has had large experience in paper mills and has been for the past three years with the above company. He is a thoroughly practical felt man in every way and we do not hesitate to congratulate him in being connected with the above company. His many friends will, no doubt, accord him the same consideration that they have given him in the past while connected with his old concern.

A. H. Seyler Goes with Cleveland Mfg. Co.

[FROM OUR REGULAR CORRESPONDENT.]

PITTSBURGH, Pa., January 19, 1925.—A. H. Seyler, manager of sales of the Alling & Cary Company, after eighteen years of service with the company has resigned to become associated with the Cleveland Manufacturing Company of Cleveland, Ohio, as vice president and general manager. Mr. Seyler has been connected with the following organizations: president, Central States Paper Trade Association; vice president, Linweave Announcement Association; sales managers Group of Pittsburgh; Rotary Club of Pittsburgh; Advertising Club of Pittsburgh; Various Printers organizations of Pittsburgh.

Accept Two Resignations

[FROM OUR REGULAR CORRESPONDENT.]

PHILADELPHIA, Pa., January 20, 1925.—The Directors of the Pennsylvania Salt Manufacturing Company at a special meeting held today, accepted the resignations of Edward E. Armstrong, as Vice President and Superintendent of Natrona Works, and of Charles M. Butterworth, as Vice President and General Sales Agent.

At the last meting, the resignation of Mr. Armstrong as General Works Manager was accepted. The Sales Department will be reorganized at once, and various staff changes will occur.

Yellow Pine and Brown Mill Consolidate Sales

[FROM OUR REGULAR CORRESPONDENT.]

MONROE, La., January 19, 1925.—The Yellow Pine Paper Company of Fort Orange, Tex., has just announced the consolidating of its sales department with that of the Brown Paper Mill Company, Inc., of Monroe, La. U. J. Meyer, sales manager of the latter concern will be in charge of the sales of both companies and all correspondence relative to either should be addressed to Monroe, La.

Throw away that scraper and kerosene can

here comes

The

VICKERY DOCTOR

Bears uniformly all way across. Gets every bit of pitch, burnt paper, and dirt. Easily adjusted and is FOOL PROOF. Absolutely will not score!

BIRD MACHINE COMPANY
SOUTH WALPOLE ~ MASSACHUSETTS

New York Trade Jottings

The Kuenster and Lucie Paper Company of 30 Great Jones street has increased its capital stock from $30,000 to $45,000.

* * *

Johaneson, Wales & Sparre, Inc., announce the removal of their offices from 16 East 41st street to 250 Park avenue.

* * *

The Mellenville Paper Company of Mellenville, N. Y., have opened sales office at 342 Madison avenue, New York.

* * *

The Spear Paper and Twine Company, Manhattan, has incorporated under New York State laws with capital stock of $20,000.

* * *

R. M. DeCew, formerly night superintendent, Price Brothers & Co. sulphite mill, Kenogami, Quebec, was in New York city last week.

* * *

Charles Shongood has been appointed custodian by Judge Mack of the paper and paper bag business of David Teich, 1740 Bathgate Avenue.

* * *

A. K. Nicholson, head of the Technical Department of the West Groton mill of the Hollingsworth and Vose Company, West Groton, Mass., was a New York visitor last week.

* * *

The A. Lewitt Paper Box Company, 169 Wooster street has filed a notice with the Secretary of State at Albany, N. Y., of a change in its name to the L. Shomer Paper Box Company.

* * *

G. F. Magnuson, who has been technical chief of the wood and pulp departments of Uddeholms A-B., Skoghall, Sweden, has become managing director of Skonviks A-B., Skonvik, Sweden.

* * *

The Joint Committee on approved chemists of the American Paper and Pulp Association and affiliated associations has approved for listing Dr. Roy Cross, 700 Baltimore avenue, Kansas City, Mo.

* * *

In the incorporation of the Broder Card and Paper Company printed in the issue of the PAPER TRADE JOURNAL of December 25, 1924, it was incorrectly stated that the capital stock of the concern was $2,000; the company is incorporated for $20,000.

* * *

The Mutual Paper Company of 185-187 Canal street moved on Saturday to their new building at 129-131 Greene street between Prince and Houston streets. They will occupy the entire building for their own stock of wrapping and tissue papers of all kinds and will keep a complete stock on the premises to enable all jobbers to pick up anything they may run short of.

* * *

The Wall Paper Manufacturers' Association of the United States at its annual meeting in the Hotel Commodore last week, launched the third year of its national advertising campaign, with a budget of $150,000. The volume of wall paper sales in 1924, it was stated, was about 15 per cent above that in 1923. The prospects for this year in the wall paper industry are considered favorable.

* * *

The United Paperboard Company, Inc., for the six months ended November 29, 1924, reports net profits of $421,148 after expenses and taxes, but before depreciation, against $357,570 in the same period of 1923. The balance sheet as of November 29, 1924, shows total assets of $12,681,307, of which cash was $231,754 and notes and accounts receivable $594,729. Liabilities totaled $12,681,307, of which preferred and common stock was $11,381,000, accounts payable $264,267 and sudplus $888,009.

Continental Salesmen Meet at St. Louis

[FROM OUR REGULAR CORRESPONDENT.]

ST. LOUIS, Mo., January 19, 1925.—The Continental Paper and Bag Mills Corporation, Western Sales Division, headquarters at St. Louis, having branch offices at Minneapolis, Omaha, Cincinnati, Indianapolis, and Kansas City, held its sixth annual convention at the company's office, 810 Clark avenue, December 29, 30 and 31.

This convention was attended by all the representatives in the following twenty-two states: Tennessee, Kentucky, Indiana, part of Ohio, part of Illinois, Arkansas, Oklahoma, Nebraska, Arizona, New Mexico, Kansas, Missouri, Iowa, Minnesota, North and South Dakota, Wyoming, Montana, Utah, Panhandle Texas, Colorado and part of Wisconsin.

The subjects of wrapping paper, paper bags, toilet, tissue, egg cartons, napkins, etc., were discussed thoroughly by the representatives.

Since the salesmen were accompanied by their wives they were entertained at the City Club on Tuesday night December 30, by George W. Reed, General District Manager. The banquet consisted of a splendid dinner and impromptu speeches by all the representatives, Harry Newkirk acting as toastmaster. Mr. Davis of Indianapolis, Mr. Kassing of Memphis, Tenn., and Mr. Leonard of Oklahoma City, acted in the capacity of an entertaining committee.

Aside from the salesmen and their wives, the office force of the St. Louis office participated in this affair and there were all told fifty-eight present, including the guests, Mr. Hartman of New York City, Mr. Hansen and wife of Marinette, Wis.

They all expressed themselves as having a very profitable and enjoyable time during the three days' convention.

News of the Baltimore Trade

[FROM OUR REGULAR CORRESPONDENT.]

BALTIMORE, Md., January 19, 1925.—The B. F. Bond Paper Company, of Baltimore, will give a banquet at 6:30 P. M. January 23 to members of the Del-Mar-Via and Maryland Press Associations, at the Wicomico Hotel, Salisbury, Md. The toastmaster will be the Hon. William S. Gordy, Jr., Comptroller of Maryland. The occasion will be the annual meeting of the Del-Mar-Via and Maryland Press Associations, which will be held in Salisbury January 23 and 24. From 75 to 100 delegates from Delaware, Maryland and Virginia will attend.

Mr. Bert Reider, of the B. F. Bond Paper Company, of Baltimore, co-operating with the committee on arrangements for the press associations' annual meeting, helped to obtain a large number of the speakers for the two days' sessions.

Two state executives—Governor Ritchie, of Maryland, and Governor Robinson, of Delaware, will address the convention.

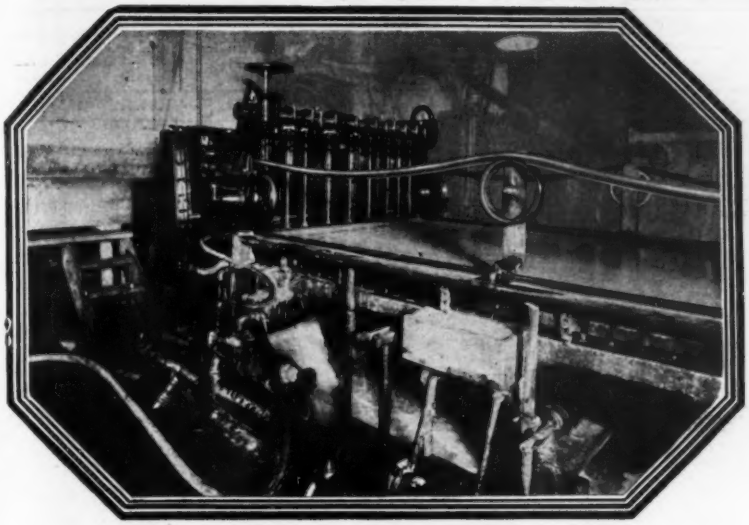
Howard W. Rowe, secretary of Dobler & Mudge, paper dealers, Baltimore, has gone for a six weeks' business and pleasure trip through Virginia, North Carolina, South Carolina, Georgia and Florida.

J. M. Kauffman, president of the Sales Club of the Typothetæ of Baltimore, and manager of the announcement department of the B. F. Bond Paper Company of Baltimore, has returned with Mrs. Kauffman from a business and pleasure trip through New England, where he visited a number of mills.

H. E. Tidmarsh Goes with Baker Mfg. Corp.

[FROM OUR REGULAR CORRESPONDENT.]

SARANAC SPRINGS, N. Y., January 19, 1925.—The Baker Manufacturing Corporation has recently appointed H. E. Tidmarsh, formerly with the Union Iron Works, Company, Bangor, Me., as general sales agent. Mr. Tidmarsh will devote his entire attention to the promotion of sales of the Baker line of pulp and paper mill machinery. Mr. Tidmarsh is well known to the pulp and paper mills.



The illustration at the left pictures the Voith Inlet installed on Machine No. 1, mentioned in the letter below. With its help paper formation was improved and caliper variation was reduced 75%. Much of the paper made on it was 18 and 20 pound basis weight, sulphite.

We have an interesting booklet, fully illustrated now ready for you, which will give all particulars regarding this remarkable new machine. Write for your copy today.

Making a Waxing Paper
Greatly Improved in Quality

Until recently the average paper made for waxing purposes offered much room for improvement. Its formation could have been much better and caliper variation was invariably too great, especially on the lighter weights.

The following letter tells how better paper was produced by a Wisconsin manufacturer, who each year makes millions of ice cream and butter cartons and thousands of yards of waxed paper.

"It may interest you to know that after we installed the Voith High Pressure Inlet on our No. 1 Paper Machine the variation across the sheet was reduced, average, 75% over what it was before the installation, and that this was accomplished within forty-eight hours after the installation. Our formation also is very much better, and more uniform. We have sent you an order for a similar installation on our No. 2 Machine."

VALLEY IRON WORKS CO.

APPLETON, WISCONSIN

New York Office: 350 Madison Avenue

PAPER AND PAPER STOCKS IMPORTS AND EXPORTS OF THE UNITED STATES

For the Month Ending November 30, 1924, and for the Eleven Months Ended November 30, 1924, as Compared with Corresponding Months of Previous Year

IMPORTS—PAPER.

Paper and Manufactures of	November				Eleven Months Ending November 30			
	1923		1924		1923		1924	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Paper, except printed matter (total)	.....	$9,410,742	.....	$9,968,034	.....	$105,612,679	.....	$107,863,768
Printing paper—								
Standard news print.....lbs..Free	216,726,377	8,157,923	224,884,254	8,134,517	2,386,679,151	89,236,305	2,462,726,859	92,080,155
All other, n. e. s. .....lbs..dut.	1,546,906	72,121	1,842,099	81,594	15,439,341	770,119	25,009,150	1,048,225
Grease-proof and water-proof papers.lbs..dut.	301,297	28,952	92,602	12,384	2,763,855	258,249	1,259,427	144,925
Wrapping paper .....lbs..dut.	6,392,010	275,004	.....	.....	81,660,940	3,635,959	.....	.....
Kraft wrapping paper.....lbs..dut.	.....	.....	2,040,265	82,573	.....	.....	26,308,977	1,011,293
All other wrapping paper.....lbs..dut.	.....	.....	1,121,591	52,462	.....	.....	20,668,460	809,526
Writing, drawing, bond, etc.....lbs..dut.	207,518	43,543	274,904	67,363	3,193,289	608,553	2,428,542	560,468
Surface coated .....lbs..dut.	82,470	22,243	159,515	38,787	1,010,891	286,430	1,776,773	416,764
Tissue paper .....lbs..dut.	193,273	62,607	182,727	80,056	1,801,111	815,044	2,222,194	905,745
Paper boards—								
Pulp boards in rolls.....lbs..dut.	3,414,884	105,035	5,582,318	145,353	72,517,142	2,066,158	72,493,918	1,994,718
Other paper boards, n. e. s. ....lbs..dut.	2,098,713	59,479	2,819,561	67,390	22,673,171	663,956	28,881,894	674,422
Cigarette paper, cigarette books and covers .....lbs..dut.	563,710	139,343	1,902,894	650,731	10,292,221	2,694,872	10,152 944	2,808,440
Photographic paper .....lbs..dut.	218,371	45,375	161,808	33,310	2,012,583	433,866	3,076,722	621,617
Hanging paper .....lbs..dut.	1,590,330	61,255	1,464,053	61,135	8,859,712	478,587	13,172,742	570,222
Paper boxes .....lbs..dut.	.....	.....	238,354	170,500	.....	.....	1,639,284	1,059,650
Decalcomania, not printed.....lbs..free	9,098	1,784	52,404	12,522	326,161	85,390	463,273	110,164
All other .....dut.	.....	336,078	.....	277,387	.....	3,559,191	.....	3,047,434
Books and other printed matter (total)	.....	857,671	.....	1,073,513	.....	8,162,687	.....	9,008,557
Books and pamphlets in foreign languages .....lbs..free	149,360	87,355	202,561	118,507	1,472,997	921,302	2,184,987	1,310,901
Books, maps, music, etc., 20 years old .....lbs..free	45,623	203,999	32,898	262,604	348,052	1,605,699	339,414	1,610,219
Other books, etc.....lbs..free	162,694	104,628	194,493	224,656	2,041,351	1,449,146	2,205,456	1,609,977
Books, pamphlets, and music, n. e. s.lbs..dut.	329,010	220,327	307,260	227,533	2,816,063	2,198,792	3,084,103	2,170,213
Maps, charts and other printed matter, n. e. s.....dut.	.....	73,024	.....	80,245	.....	639,334	.....	773,831
Lithographically printed matter, n. e. s.....								
Cigar bands, labels and flaps...lbs..dut.	18,247	18,247	5,037	7,912	233,443	192,900	90,570	129,462
Decalcomanias .....lbs..dut.	25,531	37,017	19,209	30,644	165,413	241,703	235,137	336,529
All other .....dut.	.....	113,074	.....	121,412	.....	913,811	.....	1,068,325
CRUDE PAPER STOCK.								
Rags for paper stock.....lbs..free	33,391,843	645,147	44,769,071	1,257,331	360,446,272	6,179,729	457,365,498	10,445,956
Waste, bagging, waste paper, etc..lbs..free	6,682,162	88,128	9,481,125	132,436	120,918,025	1,654,041	99,507,413	1,175,192
Old rope and all other paper stock.lbs..free	10,407,883	532,083	6,752,807	395,921	95,433,276	4,377 703	89,370,740	4,761,018
WOOD PULP.								
Mechanical pulp .....tons..free	27,380	946,778	22,174	670,172	235,894	8,244,003	193,681	6,445,145
Chemical wood pulp—								
Sulphite, unbleached.....tons..free	35,137	2,225,247	43,903	2,390,274	419,216	24,044,654	496,310	26,592,901
Sulphite, bleached.....tons..free	22,959	1,945,890	25,640	1,949,886	231,885	20 621,228	247,991	19,115,055
Total sulphite .....tons	58,096	4,171,137	69,543	4,340,160	651,101	44,665,882	744,301	45,707,956
Sulphate pulp, unbleached (kraft pulp) .....tons..free	16,823	1,090,233	19,436	1,124,135	208,920	13,690,338	252,084	14,447,825
Sulphate pulp, bleached.....tons..free	851	57,274	8,384	457,350	15,372	1,076,331	25,242	1,406,034
Other pulp .....tons..free	666	42,088	211	6,147	5,703	352,007	1,962	113,485
CHEMICALS AND OTHER PAPER MAKERS' MATERIALS.								
Colors, dyes, stains, color acids, and color bases, n. e. s.....lbs..dut.	320,179	464,745	362,595	527,277	3,017,905	4,120,071	3,017,690	3,885,352
Casein or lactarene.....lbs..dut.	1,036,784	140,770	806,562	49,312	24,927 249	4,231,368	15,762,701	1,234,520
Kaolin, china, and paper clay....tons..dut.	13,845	135,585	23,724	222,488	261,281	2,870,372	289,181	2,946,065

(*Continued on page 38*)

News of the Los Angeles Trade

[FROM OUR REGULAR CORRESPONDENT.]

LOS ANGELES, Cal., January 15, 1925.—"Business slow, but picking up," is the cryptic announcement emanating from the offices of the local paper companies. Seasonal lulls and inventories are given as the principal causes. One or two lines remain steady especially rag bond, and there is a steady upward tendency in this division. There was a brisk business in novelty wrappers around the holidays, one company turning out approximately 60,000 pounds.

While domestic business is quiet, export trade is looking up. Foreign trade in paper, which has been below normal since the war period, is expected to regain its normal position during 1925.

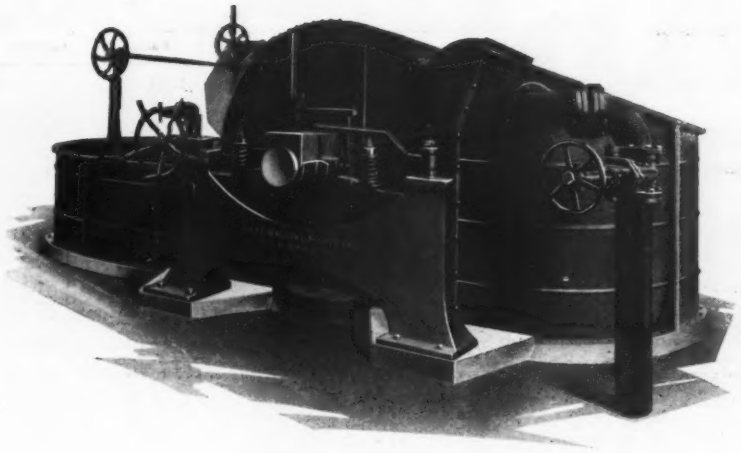
"Export business," said William Henry, vice president and general manager of the Pioneer Paper Company, "is increasing rapidly. During the past thirty days, sales and production have been 25 per cent higher than for the corresponding period of 1924."

This statement is substantiated by the report of Clarence M. Matson, manager of the Foreign Trade Department of the Los Angeles Chamber of Commerce in which it is claimed that nineteen hundred and eighty-nine tons of paper were shipped from the local port during the month of December.

R. K. Erlandson, manager of Blake, Moffit & Towne, has just returned from an extensive trip in the east where he visited many of the mills. He reports lively business in the Middle West, but a marked falling off of general activity in the far east.

Increasing business has caused the Pioneer Paper Company to reorganize its sales force, and a 25 per cent increase in the personnel will be effected at once. Branch offices will be established in a dozen Pacific Coast cities for the distribution of slate surfaced shingles, according to an announcement by J. H. Plunkett, director of sales of the company, and the new department will be under the supervision of H. L. Wilber.

"Your paper is made in the Beaters"



How much better is this new Dilts Beater

than the ordinary Hollander engine, you ask? And we are glad to answer.

Stock of like density travels much faster in the new Dilts Beater.

It carries a heavier furnish than your other beaters can circulate.

Stock is more thoroughly mixed.

Lodgers never have a chance to lodge.

Roll speed and roll adjustments are the same as in your present beaters. And no more power is required than you are using now.

The new Dilts Beater is past the experimental stage. Seven Beaters of this type have been installed. Six additional are also on order and under construction. Write and we shall gladly send you the story.

Dilts

MACHINE WORKS, Inc. FULTON, N.Y.

EXPORT OFFICE ~15 PARK ROW~ NEW YORK CITY

7460

PAPER AND PAPER STOCKS IMPORTS AND EXPORTS OF THE UNITED STATES

(*Continued from page 36*)

EXPORTS—PAPER.

Paper and Manufactures of	November 1923 Quantity	November 1923 Value	November 1924 Quantity	November 1924 Value	Eleven Months Ending November 30 1923 Quantity	Eleven Months Ending November 30 1923 Value	Eleven Months Ending November 30 1924 Quantity	Eleven Months Ending November 30 1924 Value
Paper, except printed matter (total)	.....	$1,926,642	.....	$1,999,917	.....	$23,496,542	.....	$22,707,341
Printing Paper—								
News Print Paper....lbs.	2,623,878	129,383	2,907,599	164,831	28,934,186	1,459,992	31,617,594	1,637,628
Book paper, not coated....lbs.	1,830,792	204,066	2,111,322	216,137	24,771,442	2,794,758	17,021,194	1,921,168
Cover paper....lbs.	65,376	12,992	101,578	20,088	1,070,420	190,834	756,791	143,894
Greaseproof and waterproof paper....lbs.	117,932	13,390	112,594	12,805	1,519,395	197,939	1,481,735	173,493
Wrapping paper—								
Kraft paper....lbs.	121,871	10,201	42,659	3,999	779,433	70,781	583,361	68,192
Other wrapping....lbs.	2,031,070	166,654	1,780,523	126,584	23,477,504	1,895,115	22,330,976	1,799,261
Writing paper, except papeteries....lbs.	497,831	90,698	255,440	44,198	5,593,095	935,403	4,162,203	662,808
Surface-coated paper....lbs.	295,453	45,316	236,117	36,505	3,710,516	566,841	3,225,571	477,353
Tissue and crêpe paper....lbs.	371,902	88,985	283,643	74,102	3,071,660	772,724	2,601,915	717,466
Toilet paper....lbs.	226,838	25,152	324,854	36,225	4,297,012	506,811	3,967,668	461,110
Paper towels and napkins....lbs.	102,465	15,313	81,822	15,219	1,131,306	189,925	1,312,607	210,202
Bristols and bristol board....lbs.	50,633	6,666	106,025	7,029	1,820,480	152,666	834,925	99,914
Paper board and straw board....lbs.	2,964,030	146,999	4,126,757	164,164	50,764,102	2,423,810	67,417,568	2,638,068
Sheathing and building paper....lbs.	437,170	19,789	934,243	49,597	5,343,004	156,850	5,881,268	286,730
Wall board of paper or pulp....sq. ft.	1,692,064	66,252	847,651	27,458	14,202,434	531,132	15,041,784	503,522
Blotting paper....lbs.	.....	.....	213,975	25,130	.....	.....	2,261,184	273,711
Filing folders, index cards and other office forms....lbs.	.....	.....	31,450	10,517	.....	.....	402,476	142,769
Cigarette paper and books....lbs.	18,645	6,420	17,738	5,606	467,767	157 345	814,454	290,931
Photographic paper....lbs.	133,726	102,641	93,759	75,166	1,537,502	1.319,331	1,494,816	1,488,486
Paper hangings (wall paper)....yard	1,308,250	35,162	1,589,943	42,925	20,512,948	515,213	21,237,148	559,801
Paper bags....lbs.	575,933	62,246	648.178	57,116	8,098,669	806 437	9,325.134	867,471
Boxes and cartons....lbs.	768,067	84,321	1,484,021	152,123	10,165,895	978,186	12,843,666	1,106,699
Carbon paper....lbs.	84,612	59,481	63,246	49,070	811,980	635,958	830,475	657,142
Envelopes....lbs.	257,942	51,226	217,225	35,523	2,551,686	502,338	2,228,747	441,414
Playing cards....pack	862,995	84,176	614,009	68,036	8,987,579	1,052,678	6,036,851	672,781
Cash register and adding machine paper..lbs.	111,920	13,293	79,397	8,847	1,063,136	116,272	1,141,386	125,925
Papeteries (writing paper in boxes)....lbs.	24,191	9,703	29,211	10,062	381,379	143,199	383,535	139,610
Other paper and paper products, n.e.s..lbs.	2,244,397	376,123	4,660,713	460,855	31,496,727	4.424,004	40,473,868	4,140,392
Books, maps, pictures, and other printed matter (total)....lbs.	4,498,072	1,772,818	5,343,285	1,588,323	45,750,594	16,435.953	51,322,791	17,766,291
Books and pamphlets....lbs.	2,553,928	771,775	3,036,590	828,982	24,390.673	7,997.490	31,094,604	8,994,344
Maps and charts....lbs.	9,344	9,790	20,848	21,477	165,769	150,506	181,212	164,932
Music in books or sheets....lbs.	71,601	38,986	52,883	28,112	544,322	331.109	591,337	354,318
Souvenir post cards....lbs.	22,504	15,859	33.763	15,327	584,754	207,504	339,541	177,872
Lithographically printed matter, except post cards and maps....lbs.	187,803	168,964	258,215	136,440	1,881,554	1,390,744	2,189,585	1,773,692
Other printed matter....lbs.	1,652,892	767,444	1,940,986	557,985	18,183,522	6,358,600	16,926,492	6,301,133
WOOD PULP AND PAPER STOCK.								
Sulphite wood pulp....tons	1,269	74,104	1,760	103,919	13,577	791,106	19,265	1,168,556
Soda wood pulp....tons	.....	.....	195	19,482	2.948	283,091	1,671	157,950
Other wood pulp....tons	44	3,607	51	3,939	2.862	152,679	4,183	417,633
Rags, and other paper stock....lbs.	10,615,396	171,644	6,158,586	110,773	101,406,307	1,761,581	106,247,675	1,835,297
PAPER AND PULP MILL MACHINERY.								
Paper and pulp mill machinery....lbs.	477,478	119,148	770,738	164,049	11,003,876	1,895,121	9,540,303	1,953,609

Against Freight Increases in Albany District

[FROM OUR REGULAR CORRESPONDENT.]

ALBANY, N. Y., January 19, 1925.—Donald G. Kibbey, of the Albany Perforated Wrapping Paper Co., and C. L. Ferguson, of the Eastern Tablet Co., this city, are actively engaged in organizing sentiment of manufacturers in this district against the proposed increase in shipping rates by railroads in trunk line territory. Messrs Kibbey and Ferguson are members of the Capital District Manufacturers' Committee. According to Mr. Kibbey capital district manufacturers will contribute $30,000 to fight the freight increase, half of this sum going for the State-wide fight against the new rates. The hearing before the Interstate Commerce Commission in Washington February 4 will be attended by many manufacturers from this district and also Walter E. Griggs, who will represent the Public Service Commission.

Mr. Kibbey stated that the increase proposed by the railroads which abrogates the group area system under which capital District Manufacturers have been enabled to ship their products under the same rate will mean an increase in freight rates in the Albany district amounting to hundreds of thousands of dollars each year. In the case of the Albany Perforated Wrapping Paper Company the proposed freight rate means an increase of $25,000 a year, he said.

Explaining the rate situation Mr. Kibbey said: "For a great number of years rates in the section west of the Mississippi have been based on a freight rate of $1.42 for 100 pounds from New York to Chicago. The St. Louis rate for instance was based on 117 per cent of this rate; Cleveland 71 per cent while Albany's rate has been 80 per cent of the New York-Chicago rate. They now propose to increase the New York-Chicago scale from $1.42 to $1.61 and then in addition increase the Albany rate to 88 per cent of the New York-Chicago rate. Under the present group area system Albany manufacturers can ship their products west at the same rate as manufacturers in Utica or elsewhere and many manufacturers locate here because of this fact. Freight shipments to Buffalo from Albany, where under the present system the rate is 65 cents for first class, will be 83 cents under the proposed plan; second class rate would be boosted from 65½ to 70½; third class from 46 to 55½; fourth class from 32 to 41½; fifth class from 27 to 29 cents and sixth class from 21½ to 23 cents."

The BELOIT Shake

15% INCREASED PRODUCTION

SIXTEEN orders, of which four are re-orders, demonstrate the remarkable achievements of the New Beloit Shake, which has been on the market only a short time. In one mill its application showed an increase in production of 15% within a few days after its installation, with more than a corresponding improvement in the formation of the sheet being run.

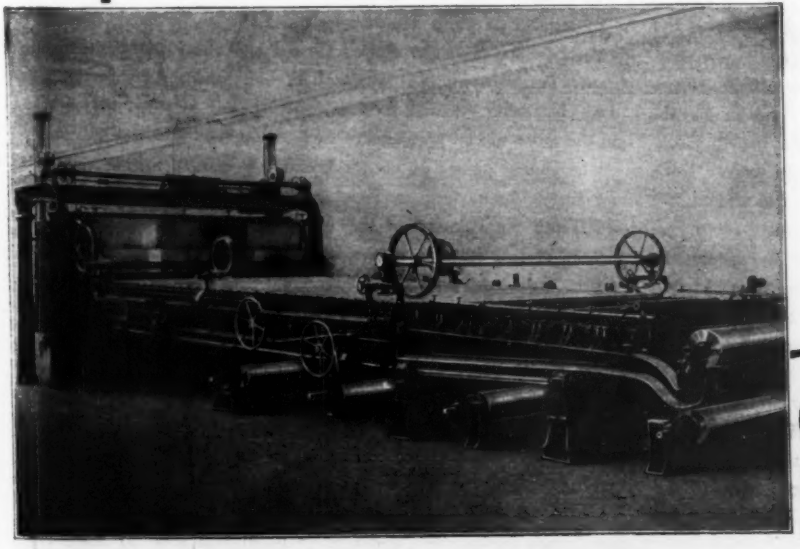
This advancement in paper making has demonstrated conclusively on fine tissues that it can produce a better formed sheet *at a higher speed.*

Proof in abundance is at hand to prove the absolute efficiency of this New Fourdrinier:

Operating on Kraft, tests have been made over long periods of time of from 68 to 72 on a 50-pound sheet, or from 36 to 44 per cent more than the usual "point to the pound."

A recent installation on sulphite papers shows tests of 37 points on a 39-pound sheet.

On another "Beloit" machine making Kraft, the paper is testing 127 per cent, while a machine of another make in the *same* mill, running 25 per cent slower on the *same* stock, produces paper testing but 93 per cent. Thus, the "Beloit," with the disadvantage of *higher* speed, is producing *a better formed* and *higher test* sheet than that made on the other.



These and many similar facts will convince the most skeptical that the superiority and efficiency of the revolutionary "Beloit" Fourdrinier has been proved in practice and not by theory.

Write for Bulletin No. 9 for further information and facts

The NEW BELOIT FOURDRINIER

Beloit Iron Works — **Beloit, Wis., U.S.A.**

Established — **Since 1858**

Editorial

Vol. LXXX New York, January 22, 1925 No. 4
HENRY J. BERGER, Editor

COMING EVENTS

American Paper and Pulp Association, Convention and Meeting of Affiliated Associations, Waldorf-Astoria, February 2-5.

Technical Association of the Pulp and Paper Industry, Convention, Waldorf-Astoria, February 3-5.

Salesmen's Association of the Paper Industry, Convention, Waldorf-Astoria, February 2-5.

Canadian Pulp and Paper Association, Convention and Meeting of Affiliated Bodies, Ritz Carlton Hotel, Montreal, January 28-30. Technical Section, January 28-29. Woodlands Section, January 29. Annual Dinner, Friday evening, January 30.

PAPER WEEK IN NEW YORK

Judging from present indications "Paper Week" in New York this year during the week beginning February 2, gives promise, in spite of the earlier date at which the conventions are to be held, of being unusually successful—although there are some important changes from recent years in the program. The National Paper Trade Association will not meet this year at this time, but will hold its annual convention early in April at which time it has been meeting for some years past. The Paper Exposition which has been a feature of "Paper Week" for the past two years also will not be held this year as the change in date of the convention from April to February made it impossible to secure suitable accommodations in New York at this time. The "Paper Show" it is stated, however, will be resumed in New York in 1926 on a larger and more attractive scale than ever.

Paper Week this year will include the convention of the American Paper and Pulp Association and meetings of practically all of its affiliated associations among them the Technical Association of the American Paper and Pulp Associations, the Salesmen's Association of the Paper Industry, the Woodland's Section, the Converters' Association, the Wax Paper Manufacturers' Association, the Pulp Producers' Association, the Writing Paper Manufacturers' Association, the Cover Paper Manufacturers' Association, the Tissue Paper Manufacturers' Association, the Card Board Manufacturers' Association, the Gummed Paper Manufacturers' Association, the Vegetable Parchment Manufacturers' Association, the Binders' Board Manufacturers' Association and others.

United States Senator George H. Moses of New Hampshire, the Rev. Dr. Nehemiah Boynton and a nationally known humorist will be the speakers at the forty-eighth-annual banquet of the American Paper and Pulp Association at the Waldorf Astoria Hotel, New York, on Thursday, February 5, 1925.

This will be the culminating feature of "Paper Week," which as usual will include the meetings of the various affiliated organizations of the American Paper and Pulp Association with Thursday left free for the annual meeting of the central organization of the paper industry of the United States—the American Paper and Pulp Association.

While banquet plans have been going forward actively, an elaborate program of discussion of business conditions is being arranged for the forenoon session. At this session there will be a discussion of the situation in each branch of the industry by one of the leaders in each field. Among those who have already consented to discuss special phases of the situation are Charles McKernon, Housatonic, Massachusetts, on fine paper, M. E. Marcuse of Richmond, Virginia, who will talk on wrapping paper, George M. Seaman of Chicago, on board, and J. P. Hummel of Hopewell, Virginia, on pulp and pulpwood in South, John C. Howell of the Brookmire Economic Service will speak on the application of statistics to trade association activity and other important problems to the industry will be similarly discussed by authorities in their respective fields.

An interesting feature of the annual meeting of the American Paper and Pulp Association will be the report of the Executive Secretary, Dr. Hugh P. Baker, covering the accomplishments of 1924 and the problems to be met in 1925.

Wm. G. MacNaughton, secretary of the Technical Association of the Pulp and Paper Industry announces an unusually good program for the annual convention of the technical men at the Waldorf Astoria Hotel February 3-5.

At the general sessions will be presented the newest developments in the industry.

John E. Alexander and engineers associated with him will describe the design and operation of his paper drying machine using direct electrical heat. This machine is of commercial dimensions and has been operating successfully for several months.

A. J. T. Taylor will describe the Ruths Vapor Accumulator and record his observations of a large number of installations during his visit of several months in Sweden, investigating its use in pulp and paper mills.

In W. W. Greenwood's paper will be given the first presentation of an artificial pulpstone of novel construction that after several years' experimentation has been developed by the Norton Company. The fact that it is a Norton Company product and that it is being used commercially gives assurance of success.

A number of the committees—Heat, Light and Power; Mechanical, Soda and Sulphate Pulps; Coated and Processed Papers and Paper Testing—will hold sectional meetings under the direction of their chairmen. At these sectional meetings will be presented papers on the more special problems of each group.

The annual dinner of the Technical Association will be held at the Hotel Commodore on Tuesday evening, February 3. As it is the Tenth Anniversary of the formation of the Technical Association, special features in the way of speakers and entertainment will be provided. Ladies will attend and it is expected that a large number of members and their friends will be present to participate in the function.

Practically every detail has been concluded for the Sixth Annual Convention of the Salesmen's Association of the Paper Industry, to be held at the Hotel Waldorf-Astoria on Tuesday, February 3, 1925. The New York committee in charge has been working vigorously, and the only detail not settled is the identity of the second speaker for the evening banquet. Two men of national prominence are in view, and announcement will soon be made as to the identity of the one who is selected.

Short and to the point will be the rule for the forenoon business session. Opening at 10:30, in the East Room, on the mezzanine floor of the Waldorf-Astoria, the first portion of the program will

be the transaction of the necessary business, making of annual reports, and election of officers.

The program feature of the forenoon session will be a discussion of "Current Events" by H. V. Kaltenborn, whose address at the annual banquet last year was so valuable that there was a general demand that he be asked to speak to the Association again this year.

There will be no afternoon session, but the annual banquet, in the Roof Garden of the same hotel, will be featured by the best program in the history of the Association. Edgar A. Guest whose appearance at a fall conference meeting of the Association at Chicago made such an impression, is to be one of the two speakers, the other to be either a prominent business man whose remarks on business conditions will carry weight through the nation, or an after dinner speaker whose reputation is unexcelled in America for power and interest.

The banquet is to be a men's function, but will be of the usual high character which has given the Salesmen's Association such a high position in the paper industry as an organization of thinking men, who are convinced of the importance of salesmanship of the highest type in the modern business world.

During the dinner there will be special music, both vocal and instrumental, with some community singing by the guests, led by a musician with the power to make his whole audience join in the singing of familiar airs.

The American Paper and Pulp Association is sending out announcements of reduced railroad rates for the convention. The reduced rate for the return trip is contingent upon the attendance of at least 250 persons who not only hold certificates but turn them in. The Association urges those who are to attend to get a certificate when their tickets are purchased and to hand it to the Secretary upon arrival at the Convention. This special arrangement means a saving of one-half the regular one-way fare on the return journey.

Pacific Coast Paper Concerns Merge

PORTLAND, Ore., January 15, 1925.—Merger of the Crescent Paper Company with the Blake-McFall Company, pioneer wholesale paper concern of the northwest, has been consummated. No figures pertaining to the deal were announced, but it is one of importance to the local business community. The Blake, McFall Company began business here approximately 50 years ago and the Crescent Company came into existence about 20 years ago.

O. W. Mielke, vice-president of the Blake, McFall Company, who will serve as general manager of the enlarged organization, stated that personnel of the newly acquired business would largely be retained. Charles R. Franzir and Ralph L. Brackett, who have been active in the Crescent Paper Company, will retire, but other officers and employes will continue with the consolidated concern. Those who remain with the business include C. D. Shorno, who has been vice-president and manager of sales.

The main office, shipping stock rooms, said Mr. Mielke, will be kept at East Third and East Ankeny streets. Service to the trade of this immediate territory will be from the east side or newly acquired west side store, according to convenience.

Those interested in the deal stated that the Blake, McFall Company easily becomes the ranking firm in its line in the northwest as result of the consolidation.

Officers of the company are C. D. Bruun, president; O. W. Mielke, vice-president and manager; F. C. Wasserman secretary-treasurer.

Mr. Carter Reports to Congress on Paper

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., January 14, 1925.—"In furtherance of the Public Printer's proposal to aid the printing industry in the standardization and grading of paper for commercial use, a cooperative investigation of millbrands of paper was undertaken by the testing section of the Government Printing Office and the United Typothetæ of America," says George H. Carter, Public Printer in his annual report to Congress made public Monday. Taking up in detail the standardization and grading of paper and other matters of interest to the paper industry, Mr. Carter says:—

Paper manufacturers have been especially helpful in this work and have generously furnished samples of their product for the thousands of tests made by experts in the Government Printing Office laboratory.

As an immediate result of this investigational work a number of changes were made in the Government paper specifications as fixed upon by the Joint Committee on Printing for the coming year so that the Government standards will conform more nearly to suitable trade grades of paper.

A tentative plan for the grading of bond and ledger papers according to definite specificatons was also prepared and submitted by the Public Printer and chief of tests to the annual convention of the United Typothetæ of America in Chicago last October. The plan met with general approval.

Attention is respectfully invited to the serious necessity of additional manufacturing and storage space in the Government Printing Office. While it has been the policy of the present administration to take advantage of the market when prices proved it good business practice to purchase in large quantities, the lack of sufficient storage space has seriously hampered this practice.

The Government Printing Office receives monthly 4,000,000 pounds of paper. In addition, there must be the storage space for printed signatures awaiting finishing operations, binding material, etc. While the changes made in the buildings in the last three years in order to gain additional space have materially added to the storage capacity, there is still a decided lack of such space.

Lack of storage space eliminates the possibility of ordering paper in large quantities. This condition materially affects production in our pressroom, because it is impossible to keep a sufficient quantity of paper on hand to insure a continuous run on press on a large order; therefore plates have to be lifted, and an additional costly make-ready is necessary when plates are returned to press for balance of order.

The Government Printing Office is compelled to keep constantly on hand paper stock worth approximately $950,000, and the only place it can be stored is in the basements of the old and new buildings. Like all basements in a manufacturing plant, innumerable steam and water pipes are hung from ceilings. With this condition, the paper stock is constantly menaced with the possibility of leakage or bursting of pipes, in which event irreparable damage would result before discovery or repairs could be made. Then, again, being compelled to use basements, the stock is subject to damage in heavy storms through inability of sewers to carry off excess water which backs up with a consequent flooding of basements.

Protest Classification of Imitation Parchment

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., January 21, 1925.—Protests are being received from paper importers it is understood in connection with the decision of the Customs Service regarding the classification of imitation parchment paper. While no statement has been made public it is understood that the Treasury officials do not intend to change this classification but that the importers will have to go to the Courts for relief.

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Chemicals for Paper Mills

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Frequent Deliveries

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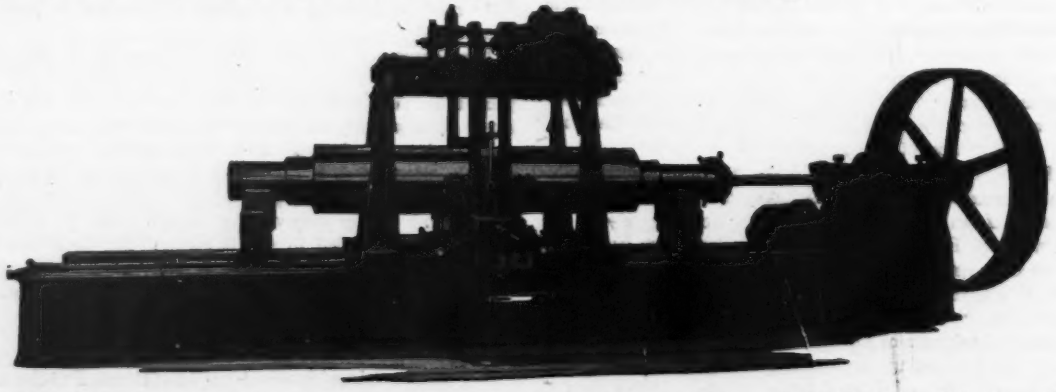
ROLL GRINDERS are the only machines of the kind fitted with automatic crowning device which develops a perfect crown without the use of a guide or former and repeated trying for the correct setting.



LOBDELL Calenders are equipped with Patent Electric Motor, Hydraulic or Ratchet Lift all operated from the floor.

LOBDELL Micrometer Calipers are handy and accurate.

LOBDELL CAR WHEEL CO. Est. 1836 **Wilmington, Del. U. S. A.**

Section of the

Technical Association of the Pulp and Paper Industry

AN ORGANIZATION FOR THE ENCOURAGEMENT OF ORIGINAL INVESTIGATION AND RESEARCH WORK IN MILL ENGINEERING AND THE CHEMISTRY OF PAPER, CELLULOSE AND PAPER-MAKING FIBERS GENERALLY; IT AIMS TO PROVIDE MEANS FOR THE INTERCHANGE OF IDEAS AMONG ITS MEMBERS IN ORDER THAT PROCESSES OF MANUFACTURE MAY BE MADE MORE EFFICIENT AND IMPROVED ALONG TECHNICAL LINES.

Conducted by W.G. MacNAUGHTON, Secretary

TENSILE TESTERS

Following an inquiry by a member as to the types of tensile testers in use and their form of calibration, sixty replies were received chiefly from members supervising paper testing. Of the 64 replies 46 advise that some form of tensile testing instrument is in use, against 18 who do not make this test. In the 46 replies six types are represented as follows:

Schopper—Standard	kg.	19
Standard	lb.	14
Rapid	lb.	2
Perkins	lb.	7
Scott	lb.	10
Riekle	lb.	1
Own make	kg.	1
		54

In some cases two or more instruments are in use, sometimes of as many different types.

Some of the comments will be interesting to other members:

"My own preference is for the metric graduation in such a place as the Bureau of Standards where most of the work is in the metric system.

"For commercial work, particularly in mill control, I would prefer the pound graduation because it would be much more readily understood by the average operator."

"Owing to the convenience of reading decimal fractions on the gram scale it is now preferable."

"I would consider a tester calibrated in grams to be the standard—the metric system will slowly predominate on this continent."

"It is my opinion, and the general opinion here, that the metric calibration is the more standard and is to be preferred."

"We consider kilos as our standard and at the present time are converting that recorded in pounds back to kilos. This is due to the fact that only the newest instruments are calibrated in pounds. All the older instruments are as the original German make calibrated in kilos, and as there are more of the older instruments in use more of the laboratories are reporting in kilos than in pounds. For this reason we have never adopted pounds as our standard."

"It is the writer's opinion that the greater majority of such machines are calibrated in the metric system and will probably continue so."

"My preference would be a tester, calibrated in nothing else but grams. If a suggestion is proper at this time I would like to say that we, as the Technical Association, should favor and support the use of the metric system everywhere."

"Until the metric system is adopted in America, I would prefer pounds to grams or kilograms, since the paper trade is not familiar generally with the metric system."

"Believe grams should be used in calibration following the general use of the metric system in scientific work."

"Our machine is calibrated in grams, and I never heard of one being calibrated any other way."

"This instrument is calibrated in grams, which we consider standard. The tendency in all scientific work is towards the adoption of the metric system of measurements. In our opinion, it is a question of only a short time before the use of this system will become universal. As a matter of fact, it is now almost universally employed by scientific men."

"Our machine is calibrated in grams, which we consider standard."

"I think we all ought to consider the registering in grams as standard."

"Our tester is calibrated in grams. We prefer the metric system in our work."

"As long as the English system is in force we believe that machines should be calibrated in pounds."

"We consider pounds as standard and convert all our figures to pounds for records and reports."

"We do not see that there would be any particular advantage in having the tester read in pounds. If it is desired for any reason to express the strength in pounds, a conversion table can easily be made up for converting kilograms to pounds."

"We obtain our results in grams, but should be inclined to think

that pounds would be a more logical basis for reporting standard results, since most other data on paper tests are reported in this manner."

"Our tester registers in pounds. I consider this form (pounds and inches) to be standard since the tests are made nearly always for those who are not familiar with the metric system. Needless to say, I prefer the metric calibration."

"We have two tensile strength testers, tissue model, portable type, which are calibrated in pounds.

"This type is preferable, inasmuch as the information is given to men in the mill or salesmen who are familiar with inches and the English system of weights and measures and are not with the metric system.

"For purely scientific work the large tester calibrated in grams would be preferred."

"In the United States I consider pounds standard, though I believe grams would be preferable."

"It is my opinion since the Mullen tester is calibrated in pounds, the tensile tester should be also, in order to develop a relation between the two in the mill."

"In answer to your question as to whether we consider grams or pounds standard, would say that either of these forms will do, and so far as we know neither one is considered as standard. I, personally, would consider the machine calibrated in grams to be more accurate.

"You will note that the American Society for Testing Materials has a specification D202-24 T which advises that the tensile tests shall be reported in kilograms and pounds together with the width of specimens in centimeters or inches. Of course, this specification is published as tentative."

"Have never seen or heard of the pound calibration and should consider the gram calibration as standard."

"Should imagine pounds would more nearly be standard for this country."

"We prefer to have it calibrated in pounds instead of grams, as our Mullen tester also reads in pounds; moreover, some of our users of paper, who have the same tester in their plants, always report their results in pounds, although their instruments are calibrated in grams."

"While theoretically I believe in the metric system, I think that the average American manufacturer feels a little happier if he can talk about pounds rather than grams.

"I think it purely a matter of choice whether the tester is calibrated in grams or pounds, and that one is just as standard as the other."

"For testing paper the instrument used is calibrated in grams, using a strip cut 15 mm. in width.

"In making tests it is customary to use strips cut 15 mm. in width and with the jaws set 100 mm. apart. It would be of mutual advantage to all concerned in paper testing if the tensile strength tester for paper would be standardized and the strips cut ½ inch wide and the readings in pounds, or with the strips cut 15 mm. in width and the readings in grams. It is my opinion that at the present time both calibrations are in use."

"I am not familiar with any paper tensile testers which read directly in pounds per inch."

"Just why we purchased one to read in pounds I cannot say, but I believe it has several advantages over an instrument calibrated in grams; for instance, tensile strength in pounds per inch strip can be readily determined without any calculation, and tensile strength in pounds per square inch can be determined without any other equipment than a paper micrometer calibrated in the English system. To obtain an ultimate result with the instrument calibrated in grams would necessitate a micrometer in the metric system; these are probably not very common in mills in the United States. The above are sufficient reasons, I feel, for the purchase of a tensile strength tester calibrated in pounds."

"Our tester is calibrated in both kilograms and pounds. We generally use the pounds scale and report tensile strength as so many thousand pounds per square inch, or so many pounds per inch width.

"However, I think that the use of kilograms or pounds is a matter of individual choice, and one is no more standard than the other."

"We would mention that in any case it is very easy to convert readings in grams to equivalent values in pounds, as it is preferable to express the results in these units."

"I do not think it matters whether a tester is calibrated in grams or pounds, as the tensile strength is usually designated by the breaking strength in yards, which can be calculated from either the pound or gram scale."

"As to whether such a machine should be calibrated in grams or pounds, it would seem rather from the standpoint of accurate expression to be a question of kilograms or pounds. From a laboratory point of view the former is probably preferable. Laboratories usually work with metric system. In this connection it is worthy of consideration that the Elmendorf tearing tester is calibrated in grams only. From a plant point of view, pounds are probably to be preferred. A larger view is that if the laboratory should become as valuable an adjunct to the manufacture and marketing of paper, as it has to some other industries, the metric system alone would be used for tests as it is for analysis (or vice versa).

"Quite a while ago we imported a tensile strain tester and requested metric units. We were surprised when the manufacturers advised us that our order was subject to delay because we requested metric units of the U. S. units. I believe that you will find far more testers in use in this country registering pounds than those which register grams.

"I do not understand why the pound tester should become standard. One of the principal uses of our tester is to determine the breaking length of the paper. This is comparatively a new consideration in paper testing in the United States. All data previously published on breaking lengths have the breaking lengths expressed in kilometers. I can see no particular reason why we should want to express it in miles and invariably have to stop and convert miles into kilometers for comparison with the data already existing. I am not a metric 'revolutionist,' but why should we build this kind of testing on a foundation of confusion so far as comparison with the large amount of previously accumulated data is concerned? There is no particular reason that I can see why the testing results should be expressed in pounds, simply because our bursting strength results as obtained with the Mullen tester are expressed in pounds per square inch. My personal preference in reference to all paper testing units would be to use the metric system basic units."

"It seems that as the results of the tensile strength tests are

not reported in any standard units, the figures being merely the breaking load for the particular sized specimen tested, it probably would be desirable to have the Technical Association standardize this test. It was only about a year ago that we learned that the manufacturer of the Schopper machine was furnishing machines equipped with grips and scales and calibrated in English units."

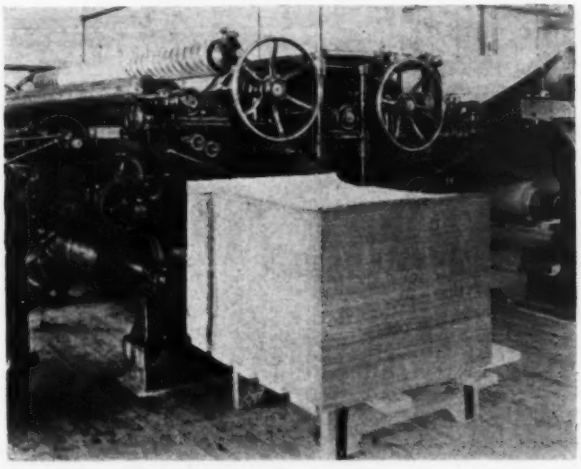
"It is our intention to purchase a tensile tester calibrated in pounds since the pound unit is standard in our mills."

"I consider that the measurement of strength of paper in pounds is standard in this country. I look on this as a great handicap to the paper as well as other industries using the English system of weights and measures and shall do all in my power to bring about the universal adoption of metric units in industrial as well as scientific fields in this country. A change from the use of English units to metric units in at least the testing of paper is a change which I believe could easily be accomplished without heavy losses in the way of scrapping of expensive apparatus or machinery. However, my personal desires and interests do not bear on the question as asked so that I must admit as stated at the beginning of this paragraph that the pound units are looked upon as the standard units in this country for reporting the strength of paper."

"We consider that a tester to be standard should be calibrated in pounds."

"We find this (pounds) most convenient as we express all our results in comparing different papers as tearing strength in pounds per inch of width."

AUTOMATIC COUNTER AND REAM MARKER



STACK OF PAPER SHOWING QUIRE COUNT

The Maxson Automatic Machinery Company, Westerly, R. I., has designed a machine to make the counting and marking of paper as it is delivered from a rotary cutter or similar machine thoroughly automatic.

It counts the sheets cut in multiples from any number of rolls up to twenty-six, placing a marker in the pile when the count is completed for the ream as the sheets pass from the cutter to the layboy. It can be arranged to count standard reams, reams divisions or quires.

The piles are automatically tagged by flagging heads one of which is positioned at the back of each pile being laid up in the layboy. A three-quarter inch strip of paper is fed through each flagging head from a roll and when the desired count total is reached by the counter the strip of paper is fed out, cut off to a length of about 5 inches, and automatically inserted between the cuts of paper.

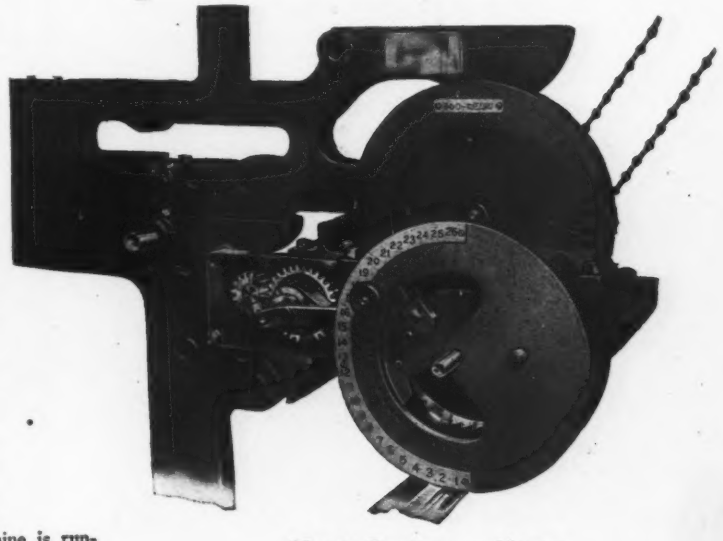
When a roll of paper is broken out or a new one put up, it is merely necessary to change the register pin (handle on lower dial) to the correct number and the exact count will be kept, thus saving all time necessary to figure out the cuts as is done in hand work. All these changes can be made while the machine is running. When the paper begins to run bad at the end of a set or when starting, the register pin is set at "no count" and a marker is put in front of the pile and the new set started with no attempt at sorting. When the paper is running good again another marker is put in front of the pile, the register pin is set at the number of rolls, and proceeds as before.

The appliance does its work automatically and with mathematical accuracy at whatever speed the cutter and layboy will run satisfactorily, being driven by sprocket and chain from the revolving knife-shaft. A duplex cutter and layboy require a counter for each knife.

A special operator is not required as the cutterman can easily give it all the attention necessary without in any way interfering with his regular duties. If a roll breaks down he has merely to move the register pin back one notch.

The Mamco Counter and Marker can be depended upon to operate with mechanical accuracy, tagging one or more piles at a time into reams, half reams, or quires. A 12 reel strand, 156-inch trim duplex cutter, 6 pile Erie Layboy quire and ream counter has been run at about 200 feet per minute with two men supervising the cutting, counting, tagging and piling of the stock.

The machine should be of interest to any mill making sheet paper as it is well known that with mental counting and hand tagging considerable trouble is experienced from inaccurate count and in addition there is a material saving in labor.



MAMCO COUNTER AND MARKER

ACCELERATING THE FORMATION OF "SLIME" IN THE BEATER*

DR. CARL G. SCHWALBE.

It is known that the beating processes may be accelerated or retarded by different chemical agents. It is not a new thing to add such agents to the beater to increase the rapidity of the beating process. It is also known that a small amount of caustic soda added to the beater will accelerate the formation of "slime" and increase the hydration of the pulp fibers. The use of acid, sulphuric acid in particular, to increase the rapidity of the beating process, is therefore not admissible besides being detrimental to the metallic parts of the apparatus.

Process Developed from Problem of Destroying Old Bank Notes

(The author describes a certain investigation that he was called upon to make for the Reichsbank in Germany to develop a process which would easily and completely destroy old bank notes. There were certain difficulties and disadvantages in attempting to burn them in a furnace. Grinding the paper in a special make of grinder was also unsatisfactory.

The author then advised the bank to try out a process which is used with considerable success in the textile industry. This is the so-called carbonizing process of treating rags composed of cotton and wool, with hydrochloric acid and steam, whereby the cotton is carbonized while the wool remains untouched.

Preliminary tests indicated that the process would give the required results. The bank notes were filled into a drum and treated with the acid or with chlorine. The action of the chemicals on the fibers was very conclusive. The material obtained by this process found some use as a filler in the manufacture of cardboard. A rather good quality of paper board was made from this material by the addition of a small amount of pulp. The color was greenish gray, the original color of the bank notes.)

In beating the softened mass obtained from the digestion of the bank notes, it was noticed that hydration of the stock took place with extraordinary rapidity. The author has observed a similar condition when beating sulphite cellulose pulp after it first has been softened. The idea of softening the stock came about after studying certain investigations made on the action of the stomach juices of animals on fodder. It was found that when the fodder was ground up as fine as possible, the digestive juices attacked it much more strongly than when the fodder was used in the state of coarse fibers. But the beating or grinding up of the tough fiber into a mass suitable for this purpose entails however the consumption of a considerable amount of power. Hence, from the success obtained in destroying bank note paper, it was concluded that chemical means could be used to shorten the process and effect a saving in power consumption.

Sulphite Pulp Gives Same Results

Sulphite cellulose pulp was treated in the same manner as the bank notes and identical results were obtained in the subsequent beating process. It was made into a cattle food after it was mixed with the proper ingredients.

The investigation was continued both with straw and pulp and it was found in both cases that when the material was first softened the rapidity of the beating process and of the hydration of the fibers was materially increased. On the other hand when wood was treated in the same manner, the results obtained were variable and not so satisfactory as with the other materials mentioned above.

The next step was to add certain materials to the beater to see if the formation of slime could not be accelerated, and if dense papers could not be manufactured without unduly prolonging the beating process. It was found that the paper produced in this manner possessed almost the character of parchment paper in density and strength. The treatment of stock with hydrochloric acid resulted in a marked shortening of the beating process.

The Character of the Acid Treating Process

The treatment of the stock with hydrochloric acid is a hydrolytic process which converts the cellulose dextrine and hydrocellulose finally into grape sugar, glucose. The treatment of the stock with acid is subjected to a great variety of conditions and by varying the factors that control the operation a rather large variety of results can be secured. The factors that are of very great significance are the strength of the acid, the temperature, the duration of the treatment, and the individual characteristics of the raw material. It must also be remembered that not every softening treatment and not every process leading to the formation of hydrocellulose produces hydrated, slow stuff.

In 1915 this process of producing a slimy material by the action of acid hydrolysis, was a new thing to the author, who however had known for a long time past that slimy material could be produced by the oxidation of the pulp. For example, if cellulose is converted into oxycellulose and if this is then treated with a little alkali and then acidified, a derivative of cellulose is obtained which is very easily converted into a slime on beating. This fact was eventually utilized in the development of a process for the purification of pulp.

Furthermore in the purification of soda cellulose it was found that under certain definite operating conditions it was possible to obtain products which on quite short beating in the beater give a pulp which produces an almost structureless paper.

From what has gone before, it is concluded that not only acids but oxidizing agents as well possess the power of changing paper stock so that it is changed into a slimy, slow stock after short mechanical treatment in the beater. The conditions under which the acids act and the properties of the finished product have been investigated by the author in a series of researches which have been reported in the *Zeitschrift fuer angewandte Chemie*.

Some Practical Tests with Soda Cellulose

About 100 kilograms of softened soda cellulose were prepared in accordance with the author's process, patented in German pat. No. 368,322 and this was used to make a dense paper. The softened stock was beaten in a beater and after a short time a large amount of slimy matter was formed. This slimy mass was added to another beater in which a different grade of stock was being treated. A sample of the mixture of stock and slime was taken and was found to give a superior, dense paper. This result was not however obtained on the paper making machine. What happened on the machine to destroy the effectiveness of the addition of the slimy material to the regular paper stuff was simply that the suction removed the slime from the paper. It went to waste in the back water.

Test in a Kollergang

A second test was made on the principle that the paper stuff must be impregnated with the slime in order to secure good results, and it was concluded that such impregnation would take place to better advantage in a kollergang than in a beater. Accordingly the softened fibrous matter was first ground up into a slimy mass with a little water in a kollergang; then the regular stock was added to the machine and thoroughly saturated with the slime. The material

* Der Papierfabrikant, 1924, 1-5.

obtained from the kollergang after this treatment was rather slow stuff, but here again the paper obtained from the paper making machine did not show that it had been benefited in any way by the addition of the slimy material to the regular paper stock. The same thing took place, the suction drawing the slimy matter out of the fibrous mixture.

The Use of Binders

The next step was to use binders or adhesive substances by adding them to the mixture of slime and fiber. Such a process was patented in German pat. No. 386,322. Animal glue was employed for this purpose, being used as a "protective colloid." The process gave good results in the laboratory but could not be tried out on a large scale.

From this work the author concluded that it would not be advisable to recommend a process for practical aplication which would require a special method and an additional step in the manufacture. The author therefore gave his attention to the problem of obtaining the desired results without the need of using softened cellulose. He made an experimental study to see whether or not it was possible to increase the formation of slimy matter as well as to hasten its formation by the addition of suitable chemicals direct to the beater, and thus effect no revolutionary change in the normal course of the papermaking process.

The first expedient tried was the addition of nitric acid to the kollergang. A small experimental apparatus gave good results. Particularly waste paper pulp was rapidly converted into a slimy mass by such treatment. A test was then made in a paper mill to see how the process would work on a large scale. The paper stock from the kollergang was at first extraordinarily slimy and slow in the beater. Then as the beating process was continued, the original slowness of the stuff gradually disappeared and the results obtained were just as if no addition had been made. The reason for the failure to secure good results was placed on the metal of which the beater was built, namely, iron.

Test in Beater with Bronze Knives

It was known that the presence of certain salts in contact with the slimy material had the effect of destroying this property of the stock. It was thought advisable to make further investigations wherein the injurious effect of mineral salts would be guarded against. Hence a test was made in a beater equipped with bronze knives.

The test was made as follws: Cotton as well as linen half stuff, and finally chemical wood pulp, were treated with an acid preparation in a bleaching beater and then the stuff was run into stuff chests. The stuff was left over night and a very beneficial change took place in its character due to the action of the acid. The author determined by observation that it was not at all necessary to produce hydrolysis of the cellulose and conversion into the socalled dextrines by the use of strong mineral acid, but that it was sufficient to produce a rather strong swelling or hydration of the fibers. It is possible to produce satisfactory hydration of one variety of waste cellulose by treatment with lactic acid. The lactic acid solution contained only 0.1 per cent of the acid and the hydration produced was such that 100 parts of the fiber after being subjected to the action of this acid were able to absorb as much as 500 parts of water, while before this treatment the fiber was able to absorb only one and one half parts of water per part of fiber.

Results Obtained with Various Stocks

The cellulose stock, which has been referred to, was treated in a beater provided with bronze knives, and it was then found that the beating time was considerably shortened. After the beating operation had lasted for an initial period of one hour, it was seen that the normal degree of hydration had been attained in both the cotton and linen stock. On the other hand it was also seen that the paper itself manufactured from this pulp was not improved in any way, but rather its quality was impaired in a certain sense. However in the case of sulphite cellulose a pulp was obtained by one hour's beating which had considerable mechanical strength, as was found by testing the paper manufactured from it. This indicated that the pulp would felt together well to form the paper web. The figures obtained in the testing process indicated that the shortening of the time of beating did not in any way impair the quality or valuable mechanical properties of the paper. Evidently therefore the preliminary treatment with acid had a beneficial effect on the papermaking process.

An Acid That Will Not Attack Iron

As has been mentioned, the beaters employed in making these experiments were provided with bronze knives. The next step in the author's investigation was to look for an acid which would not attack iron, as it is both inconvenient and expensive to use bronze knives in the beater. It was soon found that the acid which would attack iron only slowly and least of all was carbonic acid. This acid can be used under certain conditions to enhance the hydration of cellulose fibers. Various tests were accordingly made with this and other acids along these lines. Tests with carbonic acid however did not give good results in practical work.

The Third Method of Accelerating Beating

In what has gone before two methods of accelerating the rapidity of the beating process were described. One was the preparation of stock which has been rendered tender by exhaustive treatment. This stock is then added to the beater. Then again the normal fibrous materials were subjected to a preliminary treatment with acids and the like before it was subjected to beating in the hollamder or kollergang.

The third method for the rapid formation of a hydrated slime is through the use of slime formers, which due to their content of incrustating materials are easily converted into hydrated slimy masses. It is known that this is what takes place in the ordinary process if manufacturing parchment paper by the cooking method.

However there are certain types of pulp which have from their very nature a great tendency towards the formation of slimy masses. Particularly in the investigations made in different experimental stations in tropical countries, it has been found that there are various tropical fibers which yield a material that is very easily hydrated in the beater and forms a slow pulp after short treatment in the apparatus. This is particularly the case of the Musa fiber. It has also been observed with other South African fibers and also with the short celled bagasse fiber.

Flax or Hemp Chaff

There is however a material available in Germany (and in other countries as well) which has extraordinary properties in this respect. In other words this material is extremely susceptible to being converted into a slow, hydrated pulp. What is referred to is hemp and flax chaff.

If this material is made into a pulp in accordance with the sulphite process for example, there is obtained a material composed of extraordinarily short fibers. When this material is beaten in the ordinary type of beater, it is quickly converted into a structureless, hydrated, slimy mass. This takes only from 15 to 30 minutes. When the material is subjected to preliminary treatment with acid, the beating of the stock is materially accelerated.

At the present time it is understood that the raw materials which have been mentioned and which appear to have such important advantages of their own are used as fuel and burnt under the boilers for the generation of steam. It is however hoped that the time will soon come when it will be seen that the use of coal for this purpose is far more advantageous and that there will thus be saved a material which has such promising uses in the paper industry. When a survey is made of the field, it may be seen that there are very great quantities of these raw materials available each year in those countries where these plants are grown. Furthermore a comparison of the growth of these plants with that of pine trees will show that a

country which has been planted with flax and hemp plants will produce about six times as much cellulose material as when it is planted with pine trees. This refers to a period of one year.

Properties of the Hemp and Flax Chaff

This material to be sure has certain disadvantages. Thus for example due to the shortness of the fiber, the openings in the screens are easily stopped up by them. This is a very definite disadvantage in the processing of these materials. However it must be remembered that it will not be necessary to process very much of this material in order to obtain a sufficient quantity of the pulp to mix with ordinary wood pulp so as to be able to manufacture from the mixture a paper which has marked strength and in which the structure is very dense. It is this fact which makes it advisable for the papermaker to take this matter into consideration and give it his careful attention, for the advantages that are to be gained from the use of this material in the manufacture of paper are so great that they easily counterbalance the disadvantages in the processing of the hemp and flax chaff in the paper mill. This is after all the controlling feature and determines whether any substance is worth the trouble bothering with. A balance must be struck between the advantages and the disadvantages that surround its use so that the manufacturer may know whether or not it is to his advantage to introduce a new raw material into his plant.

Relation with the Illig Sizing Process

It is not the intention of the writer to draw any comparison between the process of the formation of a slimy, hydrated material from hemp and flax chaff as described with the Illig sizing process, as far as importance is concerned. However it should be said that as far as the conditions governing good sizing quality in paper are concerned, there have been carried out a great number of theoretical as well as practical experiments on a more or less large scale by numerous investigators in the attempt to study the factors that control the sizing process and determine those most favorable to it.

From what has been described of the process for the formation of highly hydrated stuff, and the acceleration of the beating process itself by the addition of acids and acid salts as well as by preliminary treatment of the paper stock, there is not to be found any great mass of material for the conduction of experimental investigations. The most difficult problem, namely to bring the fibrous materials into the proper state of hydration and slowness under the most favorable conditions, according to the author's experience, can only be solved by carrying out systematic investigations in the works. But the work must not be done in the way of single investigations and the immediate institution of tests after bad results have been obtained.

There are too many factors involved in this matter which can prevent a favorable result from being obtained. Thus there are the degree of dryness of the fibrous materials, the age of the fibers, the amount of incrustating materials that they contain, the mineral matter found in them, the content of the water used in the manufacturing process in certain mineral salts, the temperature at which the operation is carried out and the time it lasts. These are all factors which the author has treated in his paper entitled, Degree of Hydration and the Degree of Beating. They influence the hydration of the paper materials and hence the formation of slow stuff. It is self-evident that a single investigation on this subject will not produce results of any value as it would be manifestly impossible to establish all these factors in such a research. However when the matter is concerned with the determination of the effect of the shortening of the beating operation on the reduced consumption of power and the lessening of the amount of coal burnt under the boiler in the papermill, then there are to be seen therein certain subjects of great importance which have not been given requisite study up to the present time.

Leadbetter Paper Mills Co. Incorporates

VANCOUVER, Wash., January 15, 1925.—Articles incorporating the Leadbetter Lumber and Paper Mill Company, with a capitalization of $4,000,000, were filed with the auditor of Clarke County early this month. Camas, fourteen miles east of here, is named as the home town of the corporation. The manufacture of lumber and paper are the chief objects of the company, according to the articles. Of the capital stock, $3,000,000 is listed as common and $1,000,000 is preferred.

The incorporators are B. T. McBain, superintendent of the Columbia River Paper Mills of this city; Henry Crass, Vancouver attorney; and F. W. Leadbetter, president and chief stockholder in the Columbia River Paper Mills. The filing fee was $911. Incorporation papers will be forwarded Olympia immediately.

Other than to say that the company's activities will be centered in and about Camas, Mr. McBain, one of the incorporators, said that he was not at liberty to make a statement. F. W. Leadbetter, principal stockholder in the new corporation, who is also prominently identified with other paper mills on the Pacific Coast is now in Santa Barbara, Calif., where he was called by the serious illness of his mother.

Superheated Steam for Pulp Cooking

I have an inquiry as follows:

"We are considering the installation of superheaters primarily to increase the economy of our steam turbines, and we are interested in the effect that superheated steam will have in cooking sulphite by the direct method."

There was a discussion of this subject at the 1918 annual meeting following a paper "Superheated Steam for Cooking Sulphite" by D. C. Andrews.

On account of the advances made in recent years and the increasing use of steam flowmeters on digesters, the inquiry is presented for discussion under the "Service to Members" plan. Replies received prior to March 1 will be transcribed in blank and copies will be distributed to members who contribute to the discussion.—SECRETARY, TECHNICAL ASSCCIATION OF THE PULP AND PAPER INDUSTRY.

G. R. Ellis Resigns from Niagara Alkali Co.

NIAGARA FALLS, N. Y., January 21, 1925.—George R. Ellis has tendered his resignation as manager of sales in the Specialty Department of the Niagara Alkali Company, Niagara Falls, to take effect March 1.

Mr. Ellis has been connected with the Niagara Alkali Company and its associate company, the Electro Bleaching Gas Company, for over twelve years, and was for a long period the Western representative for the latter company with headquarters at Chicago, and during that time was eminently successful in introducing liquid chlorine in the waterworks field when that commodity had stubborn resistance.

He has had wide experience and a host of friends among the waterworks officials the country over, and in addition during the last few years has devoted much time to the sale of chemical products and equipment to the paper and textile field.

Valve Company Gives Bonuses

[FROM OUR REGULAR CORRESPONDENT.]

INDIAN ORCHARD, Mass., January 13, 1925.—The Chapman Valve Manufacturing Company today distributed about $7,000 in bonuses among its employes, the bonuses being given to those who had been with the company continuously three years or more and, varying with the length of service, from $5 to $50. About one-half of the employes received a bonus. Business is reported to have been 5 per cent larger than in 1923.

CURRENT PAPER TRADE LITERATURE

Abstracts of Articles and Notes of Papermaking Inventions Compiled by the Committee on Abstracts of Literature of the Technical Association of the Paper Making Industry

CLARENCE J. WEST, CHAIRMAN

Special Papers

Manufacture of Oil and Fat Impervious Paper Board. Blasweiler. *Papierfabr.* 22, 353-354 (Aug. 3, 1924). A brief review of the methods for the manufacture of oil and fat impervious paper. board.—J. L. P.

A Matrix of a Porous, Fibrous Mass for Multiple Copying. Paul Campion. Ger. Pat. 400,862, addition to 392,029. *Papierfabr.* 22, 419 (Sept. 7, 1924). A matrix like Japan paper is coated with stearic acid triacetin, butyl tartrate, or amyl tartrate for the manufacture of a paper for multiple copying.—J. L. P.

Parchment, Vulcanized Fiber, and Celluloid. H. Postl. *Papierfabr.* 22, 410-415 (Sept. 7, 1924). The manufacture of parchment paper, parchment board, vulcanized fiber, and celluloid is briefly described. The history of each process is outlined.—J. L. P.

Process for Preparing Paper Containing Rubber. Kurt Pelikan. Ger. pat. 400,525. *Papierfabr.* 22, 407-408 (Aug. 31, 1924). To the paper stock in the beater an artificially prepared rubber suspension is added which is coagulated in the usual way. The rubber suspension is made from raw rubber and benzene according to the Hopkinson process, and thoroughly emulsified with a protective colloid. The strength of the resulting sheet is raised and the beating time is lessened.—J. L. P.

Manufacture of Paper Board and Cardboard. Jacob Janser. Ger. pat. 397,296. *Zellstoff U. Papier* 4, 167 (July, 1924). Finely divided wood, as sawdust or chopped straw, is treated in a ball mill until the necessary degree of dispersion is reached. A slow coagulant, as sodium sulphate, is added and the resulting adhesive is applied to the required number of layers of paper sheets and dried.—J. L. P.

Manufacture of Safety Paper. Georges Fournier. Ger. pat. 399,671. *Papierfabr.* 22, 383 (Aug. 17, 1924). Paper stock is treated with microscopic powder, as Lycopodium powder, crystals, etc., in an amount to produce definite shades and designs.—J. L. P.

Standardization of Paper Board and Roofing Paper. Willi Schacht. *Wochbl. Papierfabr.* 55, Sondernummer 49-51 (June 14, 1924). Paper made from mercerized cotton showed less strength but greater capillary attraction than that made from ordinary cotton. Mercerized cotton would appear to be a source of raw material for blotting paper.—J. L. P.

Glazed Printing Paper Sized for Writing Purposes. W. Herzberg. *Zellstoff U. Papier* 4, 117-118 (June, 1924); *Wochbl. Papierfabr.* 55, 80-81 (June 14, 1924). Chiefly a discussion of trade terms. A three-quarters sized printing paper should be designated as such.—J. L. P.

Manufacture of Fancy Papers Fast to Light. Farbwerke vorm. Meister Lucius & Bruning. Ger. pat. 397,434. *Papierfabr.* 22, 336 (July 20, 1924). Solutions of leuco dye compounds are used for the coloring of paper. The colors are fast to light.—J. L. P.

Device for Pasting Paper to Cardboard. Jagenbergwerke A.-G. Ger. pat. 396,608. *Papierfabr.* 22, 336 (July 20, 1924). At the rear end of the press roll a heated roll is arranged so that the coated cardboard runs in a straight line.—J. L. P.

Manufacture of Pulp Board and Cardboard. Jacob Jansen. Ger. pat. 397,296. *Papierfabr,* 22, 335 (July 20, 1924). Several layers of paper are glued together by an adhesive which consists of a colloidal or a chemical solution of pulp, wood, or other cellulosic material.—J. L. P.

Paper for Coating Purposes. Rheinische-Westfalische Zellkern A.-G. Ger. pat. 396,328. *Papierfabr.* 22, 300 (June 29, 1924). Paper for coating purposes is made by couching together a sheet of paper with colored parchment which is covered with fancy designs.—J. L. P.

Absorbent Papers. Anon. *Papierfabr.* 22, 306-307 (July 6, 1924). A general discussion on the manufacture and the different requirements of absorbent papers, as blotting, copying, and filter papers.—J. L. P.

Manufacture of Cigarette Paper. Otto Paul Kohre. Ger. pat. 400,863. *Papierfabr.* 22, 433 (Sept. 14, 1924). To improve the quality of cigarette paper it is soaked in skim milk or milk with the fat removed.—J. L. P.

Wood-Like Cardboard. Karl Frank. Ger. pat. 400,451. *Papierfabr.* 22, 433-434 (Sept. 14, 1924). A cardboard which possesses the hardness of wood is produced by cementing together many layers of thin cardboard with a mixture of plaster of Paris and a glue.—J. L. P.

Electrical Properties of Different Papers Made from Wood Pulp. U. Retzow. *Kunstoffe,* Feb., 1924; *Papierfabr.* 22, 289-293 (June 29, 1924). Sheets of paper made from sulphite, and soda pulps, were subjected to a series of tests with reference to their electrical insulation properties. The voltage necessary to puncture a number of sheets was used as a quality test. To manufacture paper as moisture-free as possible, it is necessary that the sheet be thoroughly dried before impregnation with paraffine; the temperature of the paraffine bath is not sufficient to expel traces of water. The effect of moisture is shown by curves. Paraffine paper is preferable to untreated paper. Removal of moisture by vacuum increases the electrical resistance. Untreated paper made from soda pulp is superior to that made from sulphite pulp.—J. L. P.

Ivory and Alabaster Cardboard. H. Postl. *Papierfabr.* 22. 366-368 (Aug. 10, 1924). A discussion of the raw materials entering into the manufacture of ivory and alabaster cardboard, its manufacture, finishing and shipping. Bleached straw and wood pulp are used almost exclusively as raw materials. The analyses are given on two samples of cardboard; one sample possessed a thickness of 0.31 mm., weighed 330 g. per sq. m., and was made from three sheets of paper glued together with starch size. Its composition was 57% bleached straw pulp, 30% pine wood pulp, 5% deciduous wood pulp, 5% barium sulphate, and 3% rosin size. The second sample was similarly composed.—J. L. P.

Moist Copying Paper. Friedrich May and Josef Ehrlich. Ger. pat. 398,564. *Papierfabr.* 22, 371 (Aug. 10, 1924). A copying paper which retains its moisture is manufactured by treating paper with hygroscopic salts, in particular metallic salts, as magnesium chloride, calcium chloride, etc., when dissolved in water containing some alcohol.—J. L. P.

Manufacture of a Chemically Active Paper. Firma Friedrich. Sauer. Ger. pat. 397,364. *Papierfabr.* 22, 371 (Aug. 10, 1924). A chemically active paper is manufactured by allowing a sheet to soak in a solution of chemicals and then to dry. The solution contains salts, as potassium hyposulphite, potassium nitrate, etc., and gum or sizing materials, which may be gum arabic or gelatin.—J. L. P.

Fraud-Proof Paper Money. Hugo Grafe and Martin Wadewitz. Ger. pat. 397,363. *Papierfabr.* 22, 371-372 (Aug. 10, 1924). Paper money, which is claimed to be fraud proof, is made by adding such dyes as the sulphur dyestuffs, the vat dyestuffs, etc., to the paper stock. Upon adding alkalies or reducing agents, or both, a characteristic precipitate appears which disappears due to the action of the air and the original color is regenerated.—J. L. P.

Imitation Hand Made Paper. D. Rivage et Cie. Fr. pat.

575,495. Hand made papers are thinner along the edges and have relatively ragged edges. In order to reproduce these characteristics in machine made paper, ridges of somewhat wavy outline are produced on a suitable metal plate, and the sheet of paper is passed together with the plate, through a plater. The ridges cut the sheet giving irregular edges, and at the same time they gradually thin out the cut sheets near the edges.—A. P.-C.

Press for the Manufacture of Pulp Board or Other Articles. D. M. Sutherland, Jr. U. S. pat. 1,485,894, Mar. 4, 1924. The various rolls around which the wire passes are journalled in plates or brackets attached to the platen of the press, and therefore movable with the latter. The two stretches of the wire are in close proximity to one another, and both pass between the pressing members of the press. The platen is grooved both longitudinally and transversely to facilitate removal of the water pressed out of the pulp. The fact that the pulp, as it is being pressed, lies on two thicknesses of wire, instead of one as is usually the case, is claimed to greatly facilitate the removal of the water and decrease the chances of loss of fiber. The method of mounting of the rolls greatly facilitate the changing of the wire.—A. P.-C.

Rubberized Paper and Similar Products. P. Schidrowitz assignor to Vultex Ltd. U. S. pat. 1,502,686, July 29, 1924. Unwoven fibrous material is mixed with aqueous vulcanized rubber so that the latter is deposited upon the fibers.—A. P.-C.

Laminated Asphaltized Paper. W. L. Taylor. U. S. pat. 1,503,613, Aug. 5, 1924. Plies of paper are united by an interposed layer of asphalt or similar material except at portions where the material is intended to be cut. At the latter portions a waxy material such as paraffin which possesses lubricating quality on cutting knives is used instead of asphalt.—A. P.-C.

Transparent Paper. P. Levy-Buhler. Fr. pat. 574,465. A suitable varnish is applied to both faces of the sheet giving a transparent waterproof paper which does not soften when immersed in water.—A. P.-C.

Molding Articles of Pulp. F. Louisot, assignor to Vacuum Pulp Products Corp. U. S. pat. 1,494,362, May 20, 1924. Articles such as hollow spheres are formed from paper pulp in a perforated mold by the use of suction and of compressed air.—A. P.-C.

Fine Cardboard Making. H. Postl. *Paper* 34, No. 23, 1043-1045 (Sept. 25, 1924). Description of furnishes and processes used in German mills manufacturing ivory and alabaster boards, with notes on adhesive and drying methods.—A. P.-C.

Coated Paper. A. Ajmar. Fr. pat. 574,548. The paper is coated with silica, or silicic anhydride, either alone or mixed with other mineral fillers.—A. P.-C.

Coating or Impregnating Paper or Paper Pulp Articles. Subox Aktiengesel. Eng. pat. 213,545, Mar. 26, 1923. Paper, cardboard, molded articles or pulp from which these are to be made, are treated with lead suboxide and with a drying oil or other substance capable of reducing the oxide to the metallic state. Other metal compounds, glue, resin, etc., may also be added.—A. P.-C.

Origin and Manufacture of Parchment Papers. E. Arnould. *Paper* 34, 1083-1085 (Oct. 2, 1924). Practical manufacturing hints. —A. P.-C.

Process of Impregnating Paper. L. C. Koplin assignor to The Thomas Phillips Co. U. S. pat. 1,501,493, July 15, 1924. Tough durable paper is made by coating a lightly-calendered, unsized manila paper (with or without previous perforation of its surface) with a strengthening solution containing casein, and finally calendering the treated paper under a heavy pressure.—A. P.-C.

Transparent Paper. R. W. Brumby, C. Howard, J. Mercer and Brumby & Clarke, Ltd. Eng. pat. 213,810, June 14, 1923. Glazed imitation parchment paper is coated on both sides with oil varnish which may be colorless or tinted.—A. P.-C.

Vulcanization of "Rubber-Latex" Paper. F. Kaye. U. S. pat. 1,497,146, June 10, 1924. The stock in the beating engine is treated with a latex-containing rubber, balata or gutta-percha, to which previously has been added a small proportion of sodium sulphide or other alkali sulphide. An acid or other coagulant is afterward added, the stock is run on a paper machine, dried on heated rolls as usual, and simultaneously vulcanized.—A. P.-C.

Waterproofing Paper. F. Moeller. U. S. pat. 1,499,025, June 24, 1924. Paper is treated with thionyl chloride to waterproof it.—A. P.-C.

Rubber Latex Paper. F. Kaye. U. S. pat. 1,500,500, July 8, 1924. A rubber-containing latex is added to paper pulp after digestion and prior to passage through a paper machine and thoroughly mixed with the pulp to produce a strong paper even when low grade fiber is used.—A. P.-C.

Damping Medium for Copying Paper. F. May and J. Ehrlich. Eng. pat. 201,908, July 26, 1923. An inexpensive medium for damping copying paper prior to winding it on to a roll consists of an alcoholic solution of calcium chloride, magnesium chloride, or other hygroscopic metallic salt. These salts are unsatisfactory when applied in aqueous solution owing to their tendency to reduce the solubility of the dyes used in the ink.—A. P.-C.

Machine for Making Reinforced Wrapping Paper. F. C. Ramusino. Fr. pat. 572,700, Nov. 17, 1923. Wrapping paper made by pasting together two webs of paper and enclosing reinforcing threads or fibers between the two layers, is generally very difficult to wind into rolls, especially when it is narrow, because of the uneven thickness of the finished paper. The succeeding layers of paper in the roll have a tendency to slip owing to the presence of the reinforcing threads. This is overcome by passing the reinforcing threads between the threads of a screw which is given a suitable oscillating motion. In this manner the reinforcing threads enclosed between the two plies form wavy instead of straight lines.—A. P.-C.

New Moistureproof Board. Otto Kress, assignor to American Lakes Paper Co. A composite sheet is formed of three layers of relatively thin paper (as distinguished from paper board) united by thin films of asphaltum, and this composite sheet is cemented by waterglass or other suitable adhesive to one side of a stiffening sheet, preferably a sheet of paper board of much greater thickness and weight than the relatively thin flexible paper sheets, so as to give the requisite body to the finished product. Filler may be used in the manufacture of the sheathing paper, or of the board, or of both.—A. P.-C.

Rubberized Parchment Paper. T. C. Marshall and J. L. McClellan. U. S. pat. 1,506,317. Aug. 26, 1924. Latex is diluted with water to a 10% rubber content, and added to paper stock near the end of the beating operation, which is continued until the latex has been thoroughly incorporated. If coloring matter is used, it is preferably added before the latex. It is coagulated with alum or an acid, which causes the colloidal particles of rubber to unite and form a thin film around the individual fibers. The stuff is run on a paper machine, a cellulose gelatinizing agent such as zinc chloride or sulphuric acid is introduced, the excess of acid is removed, and the paper is dried and pressed. The flexibility, moisture resisting and dielectric properties are claimed to be improved.—A. P.-C.

Waterproofing Paper and Board. J. Frere. *Paper.* 34, 891, 895 (Sept. 4, 1924). A review of patents, chiefly American and English, granted during the last few years.—A. P.-C.

Hardening Wallboard Panels. Christoph & Unmack Aktiengesell. Fr. pat. 571,625, May 21, 1924. Sheets of cardboard are treated under pressure in an oil bath, e.g., double-boiled linseed oil, and allowed to dry slowly in the air. Several sheets are then pressed together so as to form a laminated board. The drying of the separate sheets causes resinification of the oil throughout its whole mass, and a second drying of the built up board gives it a hardness equal to that of ivory or bone, and makes it nonwarping.—A. P.-C.

Raw Stock for Photographic Papers. *Sci. Et. Industrie* 7, No. 108, 126-7 (1923); *Paper Trade J.* 79, No. 5, 41-42 (July 31, 1924). Outline of some of the defects which must be guarded against.—A. P.-C.

Why are Photographic Papers Coated with Barium Sulphate? *Sci. Et. Industrie* 7, No. 108, 127-8 (1923); *Paper Trade J.* 79, No.

6, 38, 40 (Aug. 7, 1924). The chief reasons are: to obtain a smooth, brilliant, non-porous surface, and to give more sharpness and depth than could be obtained without coating.—A. P.-C.

Art of Marbling Paper. B. J. Sansom. *Paper Maker & Brit. Paper Tr. J.* 68, 293-294 (Sept. 1, 1924); *Worlds Paper Tr. Rev.* 82, 530, 532, 534 (Aug., 1924); *Paper* 34, 903-905 (Sept. 4, 1924). A description of the English technique of mixing and applying colors in the marbling of papers for bookbinders' use.—A. P.-C.

Ancient Paper Mill Guards Secret of Antique Methods. *Paper Mill* 48, No. 36, 45, 48 (Sept. 6, 1924). Brief description of the primitive papermaking methods which are still in use at Najio, near Osaka, Japan, for the manufacture of high grade hand-made paper.—A. P.-C.

Imitation Leather. Respro Co. Fr. pat. 566704. A very loosely felted sheet of cellulosic material, e.g., a layer of carded cotton, is impregnated with a very thick and viscous adhesive, preferably a 20% solution of rubber in naphtha or gasoline. After compressing, the solvent is evaporated, the material is passed through a calender while under tension to remove any wrinkles, and finally a leather dressing is applied. The impregnating solution is added practically at the nip of the compressing rolls, so that it is worked into the fibrous mass as the latter passes between the rolls. If desired, a second impregnating treatment can be given before evaporating the solvent.—A. P.-C.

Making Artificial Lumber. Howard F. Weiss. *Pulp & Paper,* 22, 899, 904 (Aug. 28, 1924). Brief description of the manufacture of "balsam wool" and "nu-wood." Balsam wool is made from coniferous saw mill wood waste which is hogged and shredded and boiled in alkaline solution. The fibers are combed apart in a beater, fireproofed, pressed until they hold 40% moisture, and subsequently dried to 10% moisture content, again shredded and combed apart. They are then blown through an atmosphere of cement against a traveling wire screen and cemented together so that they project in all three dimensions. The dried finished product is fibrous, weighs 4 lb. per cu. ft., and has a thermal conductivity of 61 B.t.u. in 24 hr. per sq. ft. 1 in. thick per degree F., which is lower than that of balsa wood or cork. Nu-wood is manufactured from saw mill offal which is chipped small, given an alkaline treatment milder than for the manufacture of balsam wool, ground mechanically in presence of water, sized to make the pulp waterproof, flowed in a current of water on to a screen and subjected to heavy pressure, which reduces it to a stiff board like cast of wood. It is finally dried to a moisture content of 6 to 8%.—A. P.-C.

Cellulose and Lignin

Colloidal Chemistry of Cellulose. H. Wislicenus and W. Gierisch. *Kolloid Z.* 34, 169-181 (1924). Cellulose fiber (filter paper) can be broken down mechanically by careful grinding into particles that are partly soluble in water. Oxidation and swelling must be prevented as completely as possible and grinding with 4 cm. glazed balls in a porcelain ball mill gives the best results. Photomicrographs indicate a remarkable subdivision of the cellulose into particles which swell and assume a spherical shape the instant they are brought into contact with water. Even in the dry state the finest particles show a marked tendency towards agglomeration, which cannot be ascribed to cohesion due to moistening with hygroscopically absorbed water. Apparently the authors have exceeded the usual limits reached in the dispersion of solids by purely mechanical means, in which abrasives have been excluded. These limits of divisibility may be due to the great spontaneous agglomeration tendency of the finely divided particles. The fact that chemical changes cannot be prevented even under conditions of careful grinding is indicated by the marked increase in the copper number and reduction with Fehling's solution of the cellulose as grinding progresses. Because of these changes, the authors place more reliance upon their microscopic examinations than on the chemical tests. As grinding progresses the adsorption of methylene blue increased but increase in iodine adsorption is not marked. The rate of hydrolysis with sulphuric acid was shown to be much more rapid with finely ground cellulose than with the original material.—C. J. W.

Cellulose. K. Hess. *Papierfabr.* 22, 401-403 (Aug. 31, 1924); *Wochbl. Papierfabr.* 55, 2199-2201 (Aug. 30, 1924); *Zellstoff U. Papier* 4, 177-178 (Aug., 1924); *Cellulosechemie* 5, 70-71 (Aug. 31, 1924). An address consisting essentially of a review of the work of the author on the structure of cellulose, based on observations on cuprammonium solutions and X-ray spectra. Cellulose regenerated from cuprammonium solutions and cotton possesses the same structure according to X-ray analysis: it consists of a definite arrangement of $C_6H_{10}O_5$ particles connected in some unknown way. The hydrocellulose of Knoevenagen and Busch is structurally similar to cotton cellulose, and the former behaves like the latter when dissolved in cuprammonium solution. The conclusion is drawn that cellulose exists structurally, in a chemical sense, as $C_6H_{10}O_5$, and that it possesses the typical property of passing readily into solution like many inorganic salts, the nature of which cannot be explained satisfactorily by either the theory of principal valence or the partial valency of Werner-Thiele. The discussion on the paper is given in abstract form.—J. L. P.

How is Cellulose to Be Defined? Peter Klason. *Papierfabr.* 22, 373-377 (Aug. 17, 1924). Characteristic tests for cellulose, lignin, oxycellulose, and hemicellulose are reviewed, and the conclusion is reached that cellulose, especially wood cellulose, has not been exactly defined. The author defines cellulose as that portion of wood which is soluble in a sulphite cooking acid of definite composition at a temperature of 100° C. This method of estimating cellulose is as follows: wood, in the form of small sticks, or more or less disintegrated material, is placed in a 100 cc. flask provided with a special stopper and is digested at 98° C. with 100 cc. of a solution made by dissolving 80 f. sodium bisulphite and 200 cc. 1-normal hydrochloric acid per liter. The digestion is continued until the residue does not decrease further in weight. At least every fourth day the cooking acid should be siphoned off and a similar quantity of fresh acid added. Spruce wood treated in this manner for over 8 days yielded a lignin-free cellulose to the extent of 54 per cent. Thus cellulose is defined as a carbohydrate which is insoluble at 98° C. in a cooking acid which contains 13 g. free sulphur dioxide per liter. In another experiment spruce wood was employed in large pieces, more comparable to the conditions in practice, and was treated with a stronger acid solution, containing 32 g. sulphur dioxide per liter. The average lignin-free cellulose content of 7 tests was 52.5%. A decrease of 1.5% in the cellulose content, due to the effect of the stronger acid, is observed. A rasped sample of wood, when treated with the strong acid for 8 days with an acid change every day, gave a cellulose value of 47.7%. Accordingly, the author believes that there are two forms of cellulose, and one is resistant towards strong cooking acid at 98° C. and exists in a crystalline condition; the other is not resistant towards strong cooking acid and exists in an amorphous form. An analogy is drawn between cellulose and silica. Also in *Zellstoff U. Papier* 4, 213-217 (Sept., 1924).—J. L. P.

Notes on Preparation of Standard Cellulose. A. B. Corey and H. Leb. Gray. *Ind. Eng. Chem.* 16, 853-854 (Aug., 1924). A criticism of the method suggested by the Committee of the Division of Cellulose Chemistry of the American Chemical Society (*Ind. Eng. Chem.* 15, 748, 1923). The writers recommend increasing the amount of 1% caustic soda solution above 3,000 cc. for 100 g. of cotton, making possible the use of a container of such a size as will allow the cotton to move freely about in it. They consider it advisable to omit bleach if possible, to prevent oxidation of the cellulose; also, that it would be better to omit the use of rosin, on the ground of possible absorption and the introduction of impurities.—A. P.-C.

Constitution of Cellulose. R. Fabre. *J. Pharm. Chim.* 28, 398-404, 446-454 (1923). A review, chiefly of the researches of Pictet (1918), Heuser and Boedecker, Karrer, Irvine, and their co-workers.—A. P.-C.

Colloidal Nature of Cellulose and of Cellulose Esters. L. Clement and C. Riviere. *Chimie et Indus.* Special No., 578-581 (May, 1924). Brief review. —A. P.-C.

Alkali Cellulose. P. Karrer and K. Nishida. Cellulosechemie 5, 69-70 (Aug. 31, 1924). Experiments on the absorptioh of sodium hydroxide by cellulose showed no increase in the amount absorbed as the strength of the alkali varied from 20 to 43%. The cellulose, in the form of carefully prepared cotton yarn, absorbed from 13 to 15.5% of alkali, which indicates a cellulose-alkali compound having the composition $C_{12}H_{20}O_{10}.NaOH$. Such a formula requires that 100 g. cellulose react with 12.34 g. sodium hydroxide; the observed values are somewhat higher owing probably to experimental error.—J. L. P.

Swelling and Adsorption of Pulp Fibers. Carl G. Schwalbe. *Papierfabr.* 22, 403-404 (Aug. 31, 1924); *Wochbl. Papierfabr.* 55, 2259-2261 (Sept. 6, 1924); *Zellstoff U. Papier* 4, 178-180 (Aug., 1924). A brief review is given of the work on the subject. The determination of hygroscopic water is not an accurate measure of the swelling capacity of the fibers. The hydro-extraction of the water is subject to errors also, and there are experimental difficulties inherent in the method, being particularly true of cotton. For wood pulps the latter method appears useful. Maximum swelling for cotton fibers is reached after 12 to 14 hr. immersion in water; for wood pulps, 8 to 16 hr., and for artificial silk, 12 hr. The absolute values for the absorbed water with cotton was 70 to 80% of the fiber weight; similar values for artificial silk were 90 to 100%, and for wood pulps 90 to 110%. Excessive drying of the fibers, 72 hr. at 105° C., gave a water absorption of 25 to 30% less. The absorption of water is not increased markedly by the addition of chemicals: in the mercerization process, with 20 to 40% sodium hydroxide, the water absorption increases to 90% for cotton; with 5% alkali the value is 86%. Chemicals which effect a partial decomposition, as zinc chloride, sulphuric acid, etc., and yield cellulose dextrins, hydrocellulose, and oxycellulose, influence the water absorption capacity to a marked degree. Increased swelling of the fiber leads to an increased adsorption of aluminum hydroxide, but the maximum effect is observed after 8 hr. with cotton, whereas maximum water absorption occurs at the end of 12 hr. Salt adsorption may be used as a basis for differentiating between the swelling capacity of different kinds of fibers. This method of procedure depends upon the choice of salt, the reaction temperature, the time, and the concentration. Wood pulps contain incrustations which may influence the salt adsorption and therefore the latter may not be a true measure of the swelling capacity.—J. L. P.

Acid Hydrolysis of Cellulose and Wood. Carl G. Schwalbe. *Zellstoff U. Papier* 4, 115-117 (June, 1924). The acid hydrolysis of cellulose and wood is discussed with reference to hydrolysis of cellulose and wood is discussed with reference to hydration, aging, and surface phenomena. Old fibers are not as chemically reactive as young ones owing to the hard surface layer on the former. The degree of hydration of swelling varies with the nature of the fiber. Wood pulps attain their maximum hydration in about 8 hr. The swelling effect of water is more pronounced than with steam, and there is a further increase when electrolytes are added, especially organic acids. Sodium hydroxide and certain highly concentrated salt solutions, as zinc chloride and calcium thiocyanate, effect not only a swelling but also a hydrolysis. Regenerated cellulose shows the maximum hydration and ease of hydrolysis. Hydrated or swollen cellulose may originate from the following treatments: mechanical, dilute mineral acids, alkalies and mineral acids of certain concentrations, highly concentrated salt solutions, reprecipitated cellulose, and highly concentrated mineral acids. Hydrocellulose differs from hydrated cellulose by a lower moisture content, a higher reduction value, and greater ease of hydrolysis. Wood hydrolysis is a complicated procedure because of the incrustations present and consequent retardation of diffusion processes. Characteristic by-products of the hydrolysis of wood with dilute acid under high pressure are furfural, acetic and formic acids. One hundred kg. wood will yield 12 to 25% fermentable sugars, from which 6 to 12 l. of alcohol can be obtained. With concentrated sulphuric acid 30 l. of alcohol can be realized from 100 kg. wood.—J. L. P.

Mannan Content of Wood Pulp and Its Determination. Emil Heuser and Wilhelm Dammel. *Cellulosechimie* 5, 45-53 (June 15, 1924). The determination of mannan in wood pulp according to Lenze, Pleus and Miller, by extraction with 17% sodium hydroxide is subject to error in that all the mannan is not removed. Mannan is found not only in the beta-cellulose but also in the filtrate containing the gamma-cellulose. The total alkaline extract must therefore be hydrolyzed to convert the mannan to mannose, which may be ascertained as the phenylhydrazone. It is best to subject the pulp residue, after the alkaline extraction, to a hydrolysis in order to convert any residual mannan to mannose. The direct hydrolysis method of Schorger is free from these errors. The hypothesis of Sherrard and co-workers that cellulose from spruce pulp consists of cellobiose and mannose molecules is not consistent with the facts observed. The mannose appearing on acetolysis may be traced to the mannan content of the pulp. It is regarded as an impurity in the pulp, analogous to the pentosans, because it is easily removed by simple extraction with cold alkali. A pulp, so purified, which is practically pure cellulose, yields on sulpholysis the same amount of glucose, and upon acetolysis as much cellobiose, as cotton cellulose. The pentosans removed by alkaline extraction are not reprecipitated completely in the beta-cellulose portion; they are present in a larger proportion in the soluble gamma-cellulose. The alkaline extraction method for the estimation of oxycellulose, according to Lenze, Pleus and Miller, was found unsuitable. Treatment of the precipitated beta-cellulose, which Lenze assumes is oxycellulose, for 4 to 5 hours with boiling nitric acid yielded a 4% loss, although the foregoing investigators believed the product was not attacked. Distillation with hydrochloric acid gave a furfural derivative characteristic of hydroxymethylfurfural and not methylfurfural.—J. L. P.

Action of Aqueous Sulphurous Acid on Lignocellulose. C. F. Cross and A. Englestad. *J. Soc. Chem. Ind.* 43, 253T-257T (Aug. 1, 1924). The authors briefly discuss the status of the sulphite process from the scientific standpoint, showing that the basis of the process and the industry is mainly empirical, as evidenced by the methods employed for factory control of the main operation. These are based neither on the main product (cellulose) nor on the by-product (lignone-complex), nor upon the direct reaction (sulphonation) which conditions its separation from the cellulose in soluble form, but upon indirect observations made upon the inorganic reagents used. Then they give a brief outline of preliminary results of a systematic investigation of the interaction of aqueous sulphurous acid (5 to 8% SO_2) and the lignocelluloses, and also of the action of sulphurous acid on cinnamic aldehyde, dextrose, and terpenes.—A. P.-C.

The Lignin Problem. Ernst Strupp. *Wochbl. Papierfabr.* 55, Sondernummer 82-89 (June 14, 1924). A review of recent developments in the chemistry of lignin.—J. L. P.

Modified Cross and Bevan Method for Determining Cellulose in Wood. G. J. Ritter. *Ind. Eng. Chem.* 16, 947-948 (Sept., 1924). Reducing the chlorination periods from 5 to 4, and then to 3 min., was without appreciable effect on cellulose yields. Frequently observed darkening of the isolated cellulose in drying was traced to the action of the sulphur dioxide used to destroy the excess of permanganate used for bleaching the chlorinated cellulose. In the regular Cross and Bexan method the cellulose acquires a slightly gelatinous property, which is due to presence of sulphur dioxide in the cellulose, which sulphur dioxide partially hydrolyses the cellulose at 100° to 105° C., with formation of hot water soluble material. This is prevented by a slow digestion of the cellulose with hot water before final washing, which has the following advantages: (1) elimination of the undesirable gelatinous property of the cellulose, accompanied by facility in washing and filtering; (2) more thorough removal of acids and salts, resulting in a more highly hot water resistant cellulose.—A. P.-C.

Section of the

COST ASSOCIATION OF THE PAPER INDUSTRY

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THE AMERICAN PAPER AND PULP ASSOCIATION

Conducted by THOS. J. BURKE, C.A., Sec-Treas

THE LABOR PROBLEM*

By J. P. Jordan, Industrial Engineer and Former Pres. National Association of Cost Accountants

When I saw this program, it frightened me. Burke asked me if I would talk here and I said that I would. He then asked me what I would talk on and I said anything he wanted me to. So he set it down as "The Labor Problem." I thought it was more or less the attitude of labor that you wanted but five minutes ago they told me they wanted something about the accounting for labor. You see all the days of preparation I made for the talk have been lost.

I never tell a story when I talk, but I am going to break my rule this once. A colored parson came to church one morning and he said, "I am very sorry, friends, but I lost my manuscript on the way to church, so will have to depend on the Lord today. Next Sunday I will come better prepared."

There are two phases of the labor problem; one is what I thought from the program would be discussed here, that is, the labor conditions which cost men are bumping into all the time and management, to a far greater extent. The other side is accounting for labor in costs, and they are both pretty big problems, so I am going to say something a little bit at first about the labor problem from the standpoint of the attitude of labor toward management and the attitude of management toward labor.

The Situation Years Ago

About ten or eleven years ago, I had one of the wildest ideas that you ever heard of and I came pretty nearly getting started in it. Unfortunately, I wasn't able to stop productive work or I might have. I pretty nearly got a man to stake me for a couple of years in trying to work out an idea born of cost work or rather work in respect to costs. Fifteen years ago, while some companies had cost work, the situation was a good deal like it is today. There are lots of companies who think they have cost methods when they have none at all and a good many have a whole bunch of figures that they call costs that I think are not costs in the first place, and if they are, no one knows it because they are not used at all. Of course years ago, we had a great deal of trouble, far more than at present, with the various labor men in the plant and it was all through tremendous misunderstandings, because most everybody in the plant thought when you came along and wanted to get a record of time for any labor operations, either direct or indirect, whoever was getting it was nothing but a spy prying into other people's business. Even the foremen thought so. At that time we began to see more and more of the growth of labor unions which of course, as you all know, culminated very pronouncedly during the war when men became more thoroughly organized and caused quite a good deal of trouble.

Now frankly, I have never blamed men for organizing. I don't blame them today, as far as that is concerned. I think it is a perfectly just thing for labor to organize, particularly if manufacturers organize. It is a poor rule that doesn't work two ways. The great trouble with labor organizations in my mind is they are mishandled and they are built on an entirely wrong premise. There are lots of good labor leaders. I know a number I would like to be in business with all the time, but I also know a good many others that I would not want to be in business with. I have in mind particularly something which happened just at that time which put this idea into my mind.

An Interesting Case

We were dealing with molders to a great extent and perhaps some of you men know the organization of molders has been in the past a troublesome aggregation and they have one or two vice-presidents who are about as troublesome or used to be as any one else that could possibly bother one. I remember one time when we had a conference with a couple of vice-presidents in a plant that I had charge of at that time and we were not running a union shop but ran more or less on union wages—we had a sort of halfway proposition which worked out fairly satisfactorily—and a lot of the good molders could do three times the work they were doing. They wanted to. They had no more respect for their union that we did. In the midst of the discussion on this, I got the payroll out which was in detail. It was a sheet eight and one-half by eleven which showed just what each one produced each day, just what castings they made and whether it was piecework or daywork and the total earnings. If they did any indirect work, that showed on this same sheet and the run for a week. So to prove my point that they were retarding production and restricting production, I got out this payroll and turned over page after page. For instance, I remember the daily earnings of core-makers were four dollars a day. That was the union rate. The earnings on piecework were four dollars, four dollars and two cents, four dollars and four cents, three dollars and ninety-nine cents, and so all the way through it.

This was followed by a statement by the vice-president of the Molders' Union that there was no restriction, there was no limit, that one of the cardinal principles of the Molders' Union was that every man should do every ounce of work that he had in him for the benefit of the company he was doing it for. I commented on the fact it was remarkable their physical endurance was so nearly alike no matter how big or how small the man was, so that they came out within a cent or two variation.

*Address given at Commodore Hotel, New York City, at convention held by Cost Association of the Paper Industry, December 10-11-12, 1924.

Bad Strike Precipitated

I left the plant in 1913 and within about three or four months, the man who took my place, who dealt with the people a little differently than I had, precipitated one of the worst strikes in the history of the country. Any one around Buffalo at the time will remember that the Seventy-fourth Regiment and Troop I Cavalry were called out and four or five men were shot dead. They had one horrible time. They finally licked the union but it cost the company a million dollars to do it. I knew forty of our union men had no more use for the union than the man in the moon. The strike became a brawl between all the workers and it was all for nothing. There was nothing to it; but primarily, it was because of the ignorance of the men themselves of what it all meant. It was purely and simply ignorance on the part of the men and blind following of a whole lot of men who were working on a false and entirely erroneous premise.

And so at that time, it occurred to me what a fine thing it would be to create some sort of new labor union, a union started with the more skilled men, on the principles of cooperation with the management and based on a knowledge of the necessity of knowing what the production and cost would run from each individual on a higher plane of education. I had a great dream of starting up some sort of an organization of workers along that line where they would at the some time look after their own interests but do it from an entirely different standpoint than the blind alley method of the usual union proposition such as we have seen demonstrated in New York by Brindell and his strike insurance which was nothing but graft.

Ignorance on the Part of Labor

From that standpoint, what has caused a lot of the labor trouble? It has been ignorance on the part of labor. I don't mean ignorance from the standpoint of the fact that they haven't brains, but the standpoint that the labor organizations have worked on the men unreasonably—not unreasonably from their standpoint, of course, when buildings are going up so that you have the bid for bricklayers here in New York when the union rate may be twelve dollars a day, eighteen dallars a day. I wished many times when business hasn't been good that I was a bricklayer or plasterer. You can't blame men when they have the chance, to put the hooks in; it is because manufacturers and employers have put the hooks into them for a good many years. Now we come to the economic side of these problems, to get them to see that it does not pay to put the hooks in when they have a chance. You also have to educate the manufacturers and employers that it doesn't pay to put the hooks in labor when they get a chance. Right on that point, it seems to me, is the great work of the cost men in plants.

I have had a good deal to do with cost work. I have been at it off and on for twenty years or more and I am going to tell you this. The one greatest obstacle and the one greatest deterrent to the success of cost work in the plant can be found right in the cost men themselves. I would like to know (I am not going to ask you) how many of you men here have really studied that part of economics that has to do with the handling of labor and labor conditions, and why unions exist and what surrounds the problem of labor. How many of you, for instance, feel that you are not getting all that is coming to you, I don't mean financially, but in position and recognition in your plants? How many of you have really made a broad study of economics of management, of the manufacturing, of your accounting, in order that you may be properly fitted as a consultant in your business? I don't know, but I do know this: In my experience, I find so many men who are involved with cost work that have not studied into the basic conditions of the things they are accounting for. Their experience has been such that they have come through certain channels like the daily dozen in the morning—it is a lonesome job to crawl out of bed when it is chilly and start in the exercises. It is the same thing with studying up on things you may not think at the time have direct bearing on your work, such as a study of the development of labor conditions, but it really does have a bearing on the problem on which you are working. What are you accounting for costs for? Just for the fun of putting up a lot of figures? If you are, there is nothing to it. No, you are accounting for costs to be used, and a long time before those figures are ever put up and a long time perhaps before even you start getting the figures, the influence you exert and whether you are going to be a real fellow or not, must be felt throughout the entire organization that you are with.

Dealing with Plant Men

You must deal, in getting cost figures, with plant men. You have to sell yourself in the first place. You have to be some one who can get along with the men. You will have more or less to do with workmen themselves. You may sell yourself personally but you can't get away with that long if you are trying to sell something you can't sell; that is, the work you are doing. If you are going out to get certain records, you have to have tangible reasons for getting those records; you have to be able to prove what you want those records for. It isn't enough for the management to back you up and say you are this or you are that. A forced draft is a hard thing on a boiler and a forced draft in industry in getting records is a very hard thing. It might better come from spontaneous desire to give the records

Looking at this chart a moment ago, it occurred to me that one time we got up a great big chart, twelve feet long and eight feet wide. It was made of beaver board. We put very form that had to do with cost work and plant reports on there. We showed the flow of the information through those forms. It was all explained to about three hundred who had to do with cost records, clerks and others in the plant and in the office. If there had been any form in there that did not belong in the seqtuence and was not necessary, it certainly would have shown up; granting there were none, it certainly proved to everybody that every report there was necessary. I will never forget a red-headed fellow who came up to me after the thing was over; he was one of the men in the plant. He had given us more trouble than any ten others in the whole plant. He didn't know why we wanted this and what was the use of that, and all the other things. He looked at that chart a moment and he said, "I will never again as long as I live question what the office wants. That is the first time I ever understood the flow of the thing and when I come to see that, I am going to take the office's word after this that a thing is necessary. I will know it is necessary and it will be up to me to find out why it is necessary if I have to." He turned right about in that plant and I am glad to say two or three years later as a result of the change of mind, he was promoted to a higher position. That is the kind of selling that you have got to do throughout the entire plant.

Records of Material

A great many of the records come from tallying material. Your president was saying something about material records, uses of material, etc. That all comes down to workers. There you must get very clearly in mind that you owe to the workers an education so that they will know why as far as possible (and that is possible to a very great extent) those things are necessary. You will get better results. It pays to spend the time. You have to get your record of material. You have to get time records lots of times. There are a great many times when you must rely on the workers themselves for helping you to get the accurate time. There again you owe them (you may not think you do, but you do) something. They are human; they are built just the way you are and a good many times a lot of them have more brains than you think they have. They must be developed.

Unfortunately I couldn't go to war but I will tell you one thing I wanted to, and when I sat on the side lines and saw records pub-

lished in papers where riveters were making from thirty to sixty dollars a day and the boys overseas were getting thirty dollars a month, and then when I read in the papers about the wonderful backing that labor gave in the war, it made me wild. But you can't blame them, you can't blame them at all. It was their day. Yet I am not so sure about that. I will never forget one time I came out, with the Superintendent in our steel plant, from a restaurant and there in front of the door was a seven passenger touring car. The owner as he was about to step into the car, smiled and said, "How do you do?" I turned to the Superintendent and said, "Who is that?" He said, "Don't you know? He is the fellow who fills the sand buckets." I didn't have as good a car as he had. But that is all right, if you will only get that trend of mind into the proper channel. You may say, "What has that got to do with the cost man?" It has a lot to do with the cost man. The cost man is holding in the palm of his hand the most intimate records, isn't that true? Costs mean that you have in black and white and in figures the records of what every one is doing. That is a pretty delicate position to be in. Your attitude can either be favorable or unfavorable to some one in the plant, a foreman or a sub-foreman or even some worker. You may not be of the disposition to know why those figures are that way. You may not be of the disposition to help out to change those figures to something different. You may be wrong in your attitude of mind because you have seen cost literature by the ton where it speaks of figures as exposing facts or as showing up things—*the meanest kind of language to apply to cost records.*

Don't Be a Nuisance

I sat in the office one time of a works manager and there were four or five works managers in this company. The cost man came in and had a smile on his face. There was a row on in three minutes. I thought they would come to blows. I asked how that happened. The works manager said, "Confound him, every time he comes into the office with a smile on his face I know he has something on me."

I had a session with that cost man; I asked him to dinner and wrestled with him on his attitude of having those intimate figures in the palm of his hand and having the reputation with the works managers that when he came into the office with a smile on, they knew he had something on them. I told him he ought to have a smile on when he had something good and a long face when he had something that wasn't good and some tangible suggestions of how to better the condition. Unless you do that you are not going to get far as a cost man. That applies out in the shop too. If you are known as a nuisance in the shop because you haven't broadened the ideas of every one in the shop so they are with you to help you in every way, you are not going to get far. You may think that is an ideal condition but it isn't an ideal condition at all, not in the least.

I know one man who got up before an audience and told about how much good the cost records had done during the war. He said they detected the fact that they had men riding around all day on the table of a turret lathe. (Laughter) I thought that was the best I ever heard. It certainly hurt cost accounting.

Suppose you are a cost man like that and you get certain figures and you go out and talk with a foreman or superintendent or worker over anything of that kind and discuss the costs; how high will you stand? You will be the butt of all kinds of fun and get some oily waste on the side of the head.

Two Kinds of Labor

In accounting for labor, you run up against a good many propositions and now we come up to the point of a new definition for this subject. You have two different kinds of labor; I don't mean workers but I mean the labor you account for; Labor applied directly to the product and labor applied indirectly. It seems to me in cost work, one of the most lamentable things is the absolute failure of management and cost men and every one combined to realize and recognize the fact that indirect labor is just as much productive labor as the labor expended in actually making a saleable product.

I have been for the last two or three days at work on (and only finished yesterday) a boiled down article on power costs and it occurred to me more than ever, in all my experience of cost work, that here we have the New York Steam Company here in New York who have been putting in new mains down Park avenue. Think of the enormous cost of putting in a new steam line where they went below the existing mains in Park avenue and Madison avenue and ladled the dirt out in buckets; they couldn't dig a trench. You New York men probably noticed they had a long row of men, sitting three feet apart pulling up the pails. You know the cost of big insulated steam lines. It is a fabulous figure. What are they doing? They are putting in those lines to deliver steam to be sold and each steam user has a meter and you pay for your steam by the meter. In the power house where this steam is made, the production is metered and everything is metered and the coal is weighed and everything of that sort. And yet, that company can sell steam cheaper than you can generate it and make a profit. I sat there, as I was writing that article, and I thought of cost men and cost work and I thought of management and all those things.

Power Costs Neglected

Here is a plant where you have big steam boilers. You don't know what you make but you lightly take somebody's hit or miss distribution of that steam cost and you distribute that amongst the departments. I read somewhere a while ago that 62 per cent of the total cost of a plant was charged to one department. After they put in meters, it was found to be 27 per cent of the total. Imagine how much that threw off the cost of the product in that department. And so it is a productive proposition. If companies can make money by generating steam and pay such tremendous costs and pay for all the meters, it seems to me to be somewhat of definite proof that money can be saved in the steam accounts, electric, air and all of them, if the cost men and the management can only see to it that the lines are properly arranged and the consumption metered in the various departments. Every public service company manufacturing steam or electricity is in that business and it is a direct operation; yet you see power costs neglected so absolutely in a great many companies. It is because they won't spend a few dollars for a meter or a little more money for labor distribution or something of that sort. I only bring that up as an illustration of the absolute necessity for standardized accounting for labor in plants, paying as much attention if not more attention to the distribution of labor, to indirect labor operations as you do to direct operations.

I rode in on the train with a man who has charge of all the manufacturing of a large company. He told me of one plant he knew of where if they would knock out an old power house they had and build a new one at a cost of two hundred thousand dollars, using powdered coal, they could save a minimum of seventy-five thousand dollars per year. I asked him if they were going to do it. He said, "No, it has been up to the management but there isn't a chance of it because the management seems to be obsessed with the idea that direct cost is the only cost to look at." When you have power, steam, air, electricity; when you store coal, when you store fuel, when you grind coal, when you have all of these indirect costs, what is it? It is a necessary evil. Get out of it for as little as you can and let it go at that. That is all wrong. The overhead, the indirect expense or anything you want to call it, is a tremendous field. You all have more or less the same problems and if your Association can work out standardized methods of accounting for the labor in plants, particularly paying attention to the differential of various items of indirect expense, standardization of how to account for them and get comparative figures, it will be a fine thing. Don't try to get complete figures but take units. Take your electric generation; take your compressed air, if you are using

it; get the method of accounting with those things standardized. Get comparative figures and then what will you do? You will do the industry a great deal of benefit. Costs have nothing to do with selling prices when you come down to it. We hear a great deal about the great benefit it costs to detect non-paying lines and cut out unprofitable lines. You don't do anything of the sort. There isn't one chance in a million because you have to take the bitter along with the sweet. You may say you cut it out but no one ever does. You as an industry may get together and cut out lines and standardize but no individual company can do it with all the cost methods in the world. Don't try to find out how much this paper costs in all plants because that is getting too close to the cushion.

Indirect and Direct Costs

Right now I am involved in the paint industry on that very thing. It is my first attempt at a big association. There isn't so much to the paint industry from a manufacturing standpoint but still we are running into the things of great interest especially in the larger plants. I want to tell you one great big thing your Association can accomplish is to get down not into the grand costs but the analysis of hese things that make up the indirect and direct costs. You needn't worry so much about direct costs because every manager has insisted on that since the year one, but they have also neglected the indirect. So in the standardized methods of accounting for labor, getting it down into real tangible, usable units, is a field that has no bound at all in your industry and if you as an Association can take that up it would be fine. There is no mystery in it at all. Some day or other I am going to get out another book on costs. I am going to call it "Canned Costs."

Here you have a power plant. You shovel coal into the furnace and you make steam. You have only one way to tell the cost of steam. It is the same with generating electricity. It is the same with compressing air. It is the same with your Cost Department. You take each one individually; there is nothing to the cost work because there is only one way you can do it. There is only one way to handle a process method or a job lot method or operation method. There is no mystery whatever to cost accounting. Anybody who puts up any bluff that there is any great secret or great knowledge in cost accounting says nothing but piffle. It is easy; but there is a big thing in applying those things properly and getting those standardized methods going.

Sell Yourself First

Now you have an association all working together. The greatest feature of the labor problem is to first sell yourself and your wares to the people that you are accounting the costs for, your foremen, your superintendents; get them sold. It is all for their good, otherwise business can't go on. Sell that idea and then sell the methods by which you have got to account for it. Sell your management. Get yourself so broadened that you can sit across the table from them and put them under the sod in discussing labor conditions. You can do it, because if anybody else can talk those things, why can't you? Those cost men who have come up to be executives are the greatest you ever came across. For instance, Mr. Seeger, President of the U. S. Rubber Company; he was an accountant. He came up by broadening himself and he is one of the best known executives today and the head of a tremendously big company.

For the Good of Everybody

So it goes all the way through. You will find more and more the engineering type of mind being applied in accounting channels and so it comes right back to understanding. And the biggest thing you have to understand is the labor problem. In accounting for these things, sell your wares, be honest and fair, not approaching cost work from the standpoint of showing up or exposing, but getting at the facts for the good of everybody, the worker as much as the President of the Company.

COST SECTION

Kalamazoo Paper Co. Has Winter Picnic

[FROM OUR REGULAR CORRESPONDENT.]

KALAMAZOO, Mich., January 19, 1925.—Employees and officials of the Kalamazoo Paper Company and members of their immediate families gathered Saturday evening at the Masonic Temple to celebrate the annual Winter picnic, by this time a fixed event in the annals of that corporation. It was the most elaborate affair of the kind yet staged and tended to set a precedent for the general completeness of the entertainment offered.

Th first thing was the dinner, a hearty, palatable meal, served to over 1,500 guests. Three times it was necessary to set the tables to accomodate all the hungry ones. As the plant did not close down for the picnic, sixty workers were on duty operating the big machines. For those so engaged dinner was trucked to the mill and served there.

To fill in the gaps during the dinner hour, four good vaudeville acts from the Orpheum circuit, Chicago, gave a continuous performance that was greatly enjoyed.

Interest generally centered in the awarding of the garden club prizes, also prizes to entrants in the annual fall fair, held last October. The awards in cash were given to those excelling in the quality of articles shown at the fair, all being the product of the various exhibitors. These awards were made by F. M. Hodge, president of the Kalamazoo Paper Company. The winners and prizes follow:

Garden: H. J. Daniells, $10; Leo Meisterheim, $5; P. Grafuart, $3; Louis Weiser, $3.

Hand made furniture: J. C. Eestes, $10.

Embroidery: Margaret Harrington, $10; Kate Vroegindewey, $5; Anna Royles, $3; Nellie Newhouse, $3.

Crochet in wool: Eleanor Brady, $10.

Crochet work, Gertrude Vroegindewey, $10; Laura Ouding, $5; Pearl Exel, $3; Marie Lamson, $3.

Shortly after 9:00 o'clock all the features were out of the way and from that hour onto midnight the throng danced merrily to the music of Johnson's orchestra. An excellent feature of the evening was the special amusement furnished for the children.

Basis of Reorganization Plans

BOSTON, Mass., January 13, 1925.—The Boston News Bureau says that from $3,000,000 to 4,000,000 new capital will have to be provided for the reorganization of the American Writing Paper Company and that the stockholders will be expected to supply the money. These statements were brought out in answer to a question if the stock had any value at $7 a share. The News Bureau thinks that it has, as the removal of the receiver and reorganization is bound to come. It cites the following facts: "American Writing Paper Company, has outstanding $9,293,000 of first mortgage 6 per cent bonds selling at 47, on which interest was defaulted Jan. 1, 1924. These bonds are a first mortgage on plants appraised at $14,400,000. Following the bonds come $12,500,000 preferred and $9,500,000 common.

"Results for the 1924 calendar year have not been made available to the public but in 1923 the company lost about $1,600,000 from all sources, reducing its net current assets to $1,350,000 on Dec. 31, 1923, as compared with $4,372,000 four years before. It is believed that 1924 operations by the receiver have been more favorable, which improvement if it continues should furnish a more encouraging basis upon which to effect reorganization of the company.

"With the first mortgage bonds of the company selling at 47, including a year's interest accrued, it is apparent that the only value to the preferred stock is in the privilege which it may have of participating in the reorganization. It is not difficult in these days of market excitement to be carried away by the lure of a low-priced stock. Speculation may carry the stock higher but if you decide to buy into this issue you should first satisfy yourself that the fine paper industry is coming back and be willing to sweat through the necessary financial reorganization."

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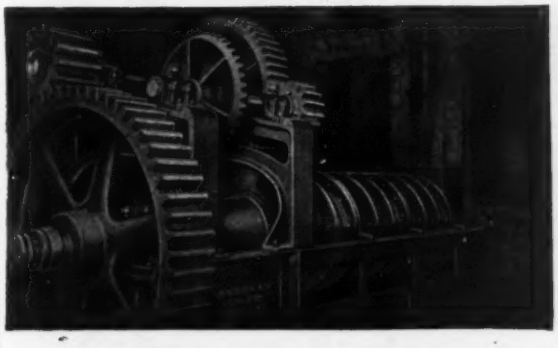

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BIDS AND AWARDS FOR GOVERNMENT PAPER

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., January 21, 1925.—The Government Printing Office has received the following bids for 40,000 pounds of No. 2 quality, 25 x 30—No. 20 binders board. R. P. Andrews Paper Company $67.20 per ton; Spaulding & Tewksbury Company $63.75; Whitaker Paper Company $66.60; C. L. LaBoiteaux Company $67.25; Twin Falls Binders Board Mills $72.50; Dobler & Mudge $67.50; Kerr Paper Mills $62.00; Philip Rudolph & Sons $70. Holliston Mills $67.50; Barton, Duer & Koch Paper Company $64.15.

The Government Printing Office will receive bids on January 19 for 60,000 pounds of pink wood bristol board in 20 inch rolls. Bids will also be received on the same date for 36,000 pounds (18,000 sheets) of No. 2 quality, 25 x 30—No. 25 binders board and for 5,400 pounds (150 reams) of 21 x 32—No. 20 yellow sulphite writing paper. Bids will also be received on January 19 for 5,000 sheets of 10½ x 8½ gray board.

The Government Printing Office has received bids for 31,400 pounds of two sizes flat kraft wrapping paper: Whitaker Paper Company 5.7 cents per pound; R. P. Andrews Paper Company 6.42 cents; Barton Duer & Koch 5.45 cents; D. S. Walton & Co 5.695 cents; Reese & Reese 5.34 cents; American Writing Paper Company 7.5 cents; and Maurice O'Meara Company 6.5 cents. Bids were also received for 23,000 pounds of kraft wrapping paper in 36-inch rolls at prices quoted above.

The Government Printing Office has received the following bids for 54,000 pounds of various sizes white mf book paper: Champion Coated Paper Company 6.49 cents; Newton Falls Paper Company 6.4288 cents; R. P. Andrews Paper Company 6.61 cents; Old Dominion Paper Company 6.349 cents and 6.44 cents; Whitaker Paper Company 6.66 cents; Kalamazoo Paper Company 6.25 cents; Bryant Paper Company 6.79 cents; Allied Paper Mills 6.75 cents; American Writing Paper Company 7.5 cents; Lindemeyr & Harker 6.4 cents, 6.48 cents, 8.1 cents and 8.2 cents; Virginia Paper Company 6.535 cents; International Paper Company 6.74 cents; P. H. Glatfelter Company 5.99 cents; and Samuel S. Alcorn 6.45 cents.

The Printing Office has also received the following bids for 40,000 pounds of 25 x 38 end paper for book waste leaves: Champion Coated Paper Company 7.65 cents; Newton Falls Paper Company 7.6538 cents; Barton-Hobart Paper Company 9.15 cents; R. P. Andrews Paper Company 6.86 cents; Mathers Lamm Paper Company 8.65 cents and 8.95 cents; Old Dominion Paper Company 7.47 cents; Whitaker Paper Company 8.7 cents; Kalamazoo Paper Company 7 cents; Allied Paper Mills 7.92 cents; American Writing Paper Company 8.25 cents; Lindemeyr & Harker 8.4 cents; International Paper Company 6.74 cents; Samuel S. Alcorn 7.35 cents.

The following bids were also received for 14,800 pounds 24 x 38—148, rope manila paper: R. P. Andrews Paper Company 10.65 cents; Barton, Duer & Koch 10.7 cents; Mathers Lamm Paper Company 10.7 cents; Old Dominion Paper Company 10.74 cents; Whitaker Paper Company 10.98 cents; T. A. Cantwell and Company 11 cents less 2 per cent; Reese & Reese 10.54 cents; Dobler and Mudge 10.58 cents; American Writing Paper Company 13.09 cents; Coy Disbrow and Company 11.2 cents.

The following bids were received for 48,000 pounds of 21 x 32—16 white glazed manifold bond paper. Barton, Duer & Koch 19.75 cents per pound; American Writing Paper Company 28.5 cents; R. P. Andrews Paper Company 19.6 cents; Whitaker Paper Company 30 cents; Dobler & Mudge 38 cents.

The Printing Office also received the following bids for 3,600 pounds of 22 x 34—18, dark pink glazed manifold bond paper: Barton, Duer & Koch, 25.72 cents; American Writing Paper Company 30 cents; R. P. Andrews Paper Company 25.5 cents; Whitaker Paper Company 32 cents; Dobler & Mudge 38 cents.

Bids were also received for 8,000 pounds of 19 x 24—80 white blotting paper; R. P. Andrews Paper Company 8.3 cents per pound and 10.3 cents; Whitaker Paper Company 9.7 cents; Reese & Reese 9.395 cents; Dobler & Mudge 9.45 cents; R. A. Cauthorne Paper Company 9.37 cents; Eaton-Dikeman Company 12.4 cents; and 11.65 cents; Old Dominion Paper Company 9.79 cents; Broderick Paper Company 11.65 cents.

The following bids were also received by the Government Printing Office for 10,000 sheets of 8½ x 12½ red rope: Mathers Lamm Paper Company $3.43 per 1,000 sheets; Reese & Reese $3.86; Broderick Paper Company $3.47; T. A. Cantwell Company $4.13; and Old Dominion Paper Company $3.99.

The Government Printing Office has received the following bids for 12,500 pounds of 21 x 32—12½ white record manifold bond paper. Barton, Duer & Koch, 42.85 cents per pound; Virginia Paper Company 42.65 cents; R. P. Andrews Paper Company 43.2 cents; Mathers Lamm Paper Company 43.4 cents; Old Dominion Paper Company 43.99 cents; Dobler & Mudge 43 cents; American Writing Paper Company 39 cents.

The Printing Office has received the following bids for 3,150 pounds of 24 x 38—31½ salmon manifold bond paper. Barton, Duer & Koch 18 cents; Virginia Paper Company 17.9 cents; R. P. Andrews Paper Company 17.85 cents; Mathers Lamm Paper Company 14.95 cents; Aetna Paper Company 17.23 cents; Old Dominion Paper Company 18.49 cents; Dobler & Mudge 18 cents; American Writing Paper Company 29 cents.

The Printing Office will receive bids on January 23 for 11,500 pounds (1,000 reams) of 17 x 28—11½ No. 9 white glazed manifold bond paper. Bids will also be received on the same date for 5,600 pounds (60 reams) of 22½ x 28—140, jute tag board.

The Government Printing Office will receive bids on January 26 for 40,000 pounds (16,000 sheets) of 25 x 30—No. 20, No. 2 quality binders board.

The Mathers-Lamm Paper Company will furnish the Government Printing Office with 3,150 pounds (100 reams) of 24 x 38—31½, No. 13 salmon manifold bond paper at 14.95 cents per pound, bids for which were received on January 12.

Barton, Duer & Koch Company will furnish 31,400 pounds (400 reams) of various sizes flat kraft wrapping paper at 5.45 cents and the same firm will also furnish 23,000 pounds of the same in various size rolls at the same price. Bids for these items were received on January 9.

The International Paper Company will furnish 40,000 pounds (500 reams) of 25 x 38 end paper at 6.74 cents per pound and P. H. Glatfelder Company will furnish 54,000 pounds of various sizes white M. F. book printing paper at 5.99 cents. Bids for these items were received on January 7.

Reese & Reese has been awarded the contract for furnishing the Government Printing Office with 14,800 pounds (100 reams) of 24 x 38—148 rope manila paper at 10.54 cents per pound, bids for which were received on January 7.

The Government Printing Office will receive bids on January 23 for 4,500 pounds (150 reams) of 21 x 32—36, No. 20 blue sulphite writing paper. Bids will also be received on the same date on 4,000 sheets of various colors 20 x 25 inch marble paper.

The C. L. LaBoiteaux Company has been awarded the contract for furnishing 150,000 pounds of calendered manila tagboard in 24 and 26¾-inch rolls at 6.87 cents; bids for which were received on January 6.

The Maurice O'Meara Company will furnish 60,500 pounds of flat and roll kraft wrapping paper at 5.5 cents per pound; bids for which were received on December 29.

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Imports of Paper and Paper Stock

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

NEW YORK IMPORTS

WEEK ENDING JANUARY 17, 1925

SUMMARY

News print.....2,941 rolls.
Printing paper.....316 bls., 195 cs.
Wrapping paper.....16 cs., 257 rolls, 317 bls.
Surface coated paper.....122 cs.
Cigarette paper.....3,788 cs.
Paper hangings.....603 bls., 8 cs.
Wall paper.....60 bls., 9 cs.
Filter paper.....12 cs., 10 bls.
Photo paper.....3 cs.
Drawing paper.....2 cs.
Gollic paper.....1 cs.
Fancy paper.....15 cs.
Tracing paper.....97 cs.
Tissue paper.....18 cs.
Copy paper.....25 cs.
Tinfoil paper.....21 cs.
Baryta coated paper.....52 cs.
Decalcomania paper.....5 cs.
Waxed paper.....4 cs.
Writing paper.....6 cs.
Strawboard.....405 rolls
Packing paper.....59 bls.
Miscellaneous paper....306 bls., 1,136 rolls, 167 cs.

CIGARETTE PAPER

R. J. Reynolds Tobacco Co., Olen, St. Nazaire, 1,520 cs.
De Manduit Paper Corp, by same, 492 cs.
American Tobacco Co., by same, 1,750 cs.
P. J. Schweitzer, La Savoie, Havre, 26 cs.

PAPERHANGINGS

W. H. S. Lloyd & Co., Minnewaska, London, 23 bls.
W. H. S. Lloyd & Co., by same, 4 cs.
A. C. Dodman, Jr., Inc., Doric, Liverpool, 6 bls.
A. C. Dodman, Jr., Inc., Franconia, Liverpool, 69 bls.
W. H. S. Lloyd & Co., by same, 14 bls.
W. H. S. Lloyd & Co., by same, 4 cs.
Janeway Carpender, Manhattan, Antwerp, 491 bls.

WALLPAPER

A. C. Dodman, Jr., Inc., Mauretania, Havre, 20 bls.
A. C. Dodman, Jr., Inc., Olympic, London, 28 bls.
A. C. Dodman, Jr., Inc., Olympic, London, 9 cs.
F. A. Binder, Stuttgart, Bremen, 12 bls.

FILTER PAPER

H. Reeve Angel & Co., Inc., Minnewaska, London 8 cs.
H. Reeve Angel & Co., Inc., Antonia, London, 4 cs.
Franco American Imp't. Corp., Olen, Bordeaux, 10 bls.

PHOTO-PAPER

J. J. Guain, Doric, Liverpool, 3 cs.

DRAWING PAPER

Keuffel & Esser, Antonia, London, 2 cs.

GALLIC PAPER

Keuffel & Esser, Antonia, London, 1 cs.

FANCY PAPER

Whiting Patterson, Inc., Antonia, Southhampton, 15 cs.

TRACING PAPER

Keuffel & Esser, Franconia, Liverpool, 97 cs.

TISSUE PAPER

F. C. Strype, Franconia, Liverpool, 6 cs.
Iwai & Co., Tsuyama Maru, Kobe, 12 cs.

COPY PAPER

Whitefield Paper Works, Tsuyama Maru, Kobe, 25 cs.

TINFOIL PAPER

Enoch Morgan Sons, Co., Franconia, Liverpool, 21 cs.

PRINTING PAPER

Oxford University Press, Franconia, Liverpool, 10 cs.
B. F. Drakenfeld & Co., by same, 20 cs.
L. Schulman, Stuttgart, Bremen, 49 cs.
M. O'Meara Co., by same, 116 cs.
M. O'Meara Co., by same, 316 bls.

NEWSPRINT

Parsons & Whittemore, Stuttgart, Bremen, 929 rolls.
Parsons & Whittemore, Westfalen, Bremen, 1,808 rolls.
M. Gotteaman & Co., Inc., Drottningholm, Gothenburg, 204 rolls.

WRAPPING PAPER

H. Reeve Angel Co., Inc., Drottningholm, Gothenburg, 1 cs.
T. Barret Son, by same, 182 rolls.
T. Barret Son, by same, 50 bls.
American Express Co., Pan America, Buenos Aires, 20 rolls.
J. B. Mast & Co., C. Verde, Genoa, 5 cs.
National City Bank, Westfalen, Bremen, 267 bls.
F. C. Strype, Manhattan, Antwerp, 10 cs.
F. C. Strype, by same, 55 rolls.

SURFACE COATED PAPER

Gevaert Co. of America, Manhattan, Antwerp, 36 cs.
L. G. Prager & Co., Westfalen, Bremen, 20 cs.
Globe Shipping Co., by same, 66 cs.

BARYTA COATED PAPER

Globe Shipping Co., Stuttgart, Bremen, 52 cs.

DECALCOMANIA PAPER

Phœnix Shipping Co., Stuttgart, Bremen, 5 cs.

WAXED PAPER

R. F. Downing & Co., Inc., Mauretania, Southampton, 4 cs.

WRITING PAPER

Coenca Morrison Co., Olympic, Southhampton, 6 cs.

STRAWBOARD

A. Vuyck, Editor, Rotterdam, 405 rolls.

PACKING PAPER

J. P. Heffernan Paper Co., Drottningholm, Gothenburg, 59 bls.

PAPER

Universal Paper Co., by same, 74 bls.
Universal Paper Co., 200 rolls.
The Barregaard Co., by same, 60 rolls.
The Barregaard Co., by same, 121 bls.
Gilbert Paper Co., by same, 87 bls.
Gilbert Paper Co., by same, 197 rolls.
Arkell Safty Bag Co., by same, 679 rolls.
H. Reeve Angel Co., Inc., by same, 7 cs.
Wilkinson Bros. & Co., Inc., by same, 14 bls.
Perkins Goodwin & Co., Tuscania, Glasgow, 60 cs.
A. C. Dodman, Jr., Inc., La Savoie, Havre, 2 cs.
Whitting & Patterson, Inc., by same, 8 cs.
Gevaert Co. of America, Manhattan, Antwerp, 26 cs.
Perry Ryes & Co., California, Glasgow, 61 cs.
F. L. Kreamer & Co., Antonia, London, 3 cs.

RAGS, BAGGING, ETC.

Katzenstein & Keene, Inc., Antonia, London, 70 bls. bagging.
Anglo So. American Trust Co., by same, 28 bls. paperstock.
Royal Manufacturing Co., Doric, Liverpool, 22 bls. cotton waste.
Brown Bros. & Co., Raifuku Maru, Hamburg, 147 bls. rags.
A. W. Fenton, Inc., by same, 111 bls. rags.
Maurice O'Meara Co., by same, 295 bls. rags.
L. H. Abenheimer, by same, 131 bls. rags.
S. Birkenstein & Sons, by same, 125 bls. rags.
Chemical National Bank, by same, 195 bls. rags.
Atlas Waste Manufacturing Co., Orizaba, Havana, 2 bls. rags.
Garfield National Bank, Stuttgart, Bremen, 136 bls. rags.
Equitable Trust Co., Manhattan, Antwerp, 109 bls. flax waste.
Goldman Sachs & Co., Olen, St. Nazaire, 418 bls. rags.
The Stone Bros. Co., Inc., by same, 256 bls. rags.
E. J. Keller Co., Inc., by same, 91 bls. rags.
E. J. Keller Co., Inc., by same, 301 bls. bagging.
E. J. Keller Co., Inc., Olen, Bordeaux, 202 bls. rags.
W. Barnett & Son, by same, 47 bls. rags.
Burmon & Bolonsky, by same, 10 bls. rags.
American Exchange National Bank, by same, 219 bls. rags.
Katzenstein & Keene, Inc., by same, 80 bls. rags.
State Bank, by same, 174 bls. rags.
Albion Trading Co., by same, 46 bls. rags.
E. J. Keller Co., Inc., Abron, Naples, 70 bls. rags.
Belgian Bank, by same, 43 bls. rags.
National City Bank, by same, 165 bls. rags.
Royal Manufacturing Co., Abron, Genoa, 53 bls. cotton waste.
National City Bank, Westfalen, Bremen, 437 bls. rags.
American Exchange National Bank, by same, 119 bls. rags.
Capitol National Bank, by same, 175 bls. rags.
L. H. Abenheimer, by same, 46 bls. rags.
S. Birkenstein & Sons, Egypt Maru, Genoa, 320 bls. rags.
Brown Bros. & Co., A. Costa, Naples, 263 bls. rags.
A. W. Fenton, Inc., by same, 112 bls. rags.
National City Bank, by same, 135 bls. rags.
Bankers Trust Co., by same, 12 bls. rags.
E. J. Keller Co., Inc., Editor, Rotterdam, 189 bls. bagging.
E. J. Keller Co., Inc., by same, 458 bls. rags.
Castle & Overton, Inc., by same, 87 bls. bagging.
A. W. Fenton, Inc., by same, 36 bls. bagging.
Katzenstein & Keene, Inc., Tuscania, Glasgow, 27 bls. paper stock.
Castle & Overton, Inc., Nessian, Manchester, 68 bls. bagging.
Castle & Overton, Inc., Rhode Island, Leith, 306 bls. jute waste.
Castle & Overton, Inc., Doris, England, 75 bls. rags.
E. J. Keller Co., Inc., Cleveland, Hamburg, 609 bls. rags.
E. J. Keller Co., Inc., Cleveland, Stockholm, 78 bls. rags.
E. J. Keller Co., Inc., Mongolia, Copenhagen, 262 bls. rags.
E. J. Keller Co., Inc., Floridian, Kobe via Seattle, 100 bls. rags.

OLD ROPE

Brown Bros. & Co., Doric, Liverpool, 83 coils.
T. J. Owen, Cayo Mambi, Santiago, 3 bls.
E. J. Keller Co., Inc., Veendam, Rotterdam, 46 coils.

MANILA ROPE

Ellermans Wilson Line, Minnewaska, London, 14 coils.

WOOD PULP

Hartig Pulp Co., Raifuku Maru, Hamburg, 1,000 bls. wood pulp, 102 tons.
W. Hartman, by same, 300 bls. wood pulp, 46 tons.
Ira L. Beebe & Co., by same, 887 bls. sulphite pulp, 133 tons.
Bulkley, Dunton & Co., Stuttgart, Bremen, 450 bls. sulphite pulp.
Hartig Pulp Co., by same, 625 bls. sulphate pulp.
Bulkley, Dunton & Co., Westfalen, Bremen, 2,050 bls. sulphite pulp.
E. J. Keller Co., Inc., Editor, Rotterdam, 247 bls. woodpulp, 52 tons.
Price & Pierce, Ltd., Drottningholm, Gothenburg, 800 reels wood pulp.
Price & Pierce, Ltd., by same, 125 bls. dry pulp.
Scandinavian Pulp Agency, Inc., by same, 254 bls. sulphite pulp.

(*Continued on page 62*)

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A. R. MELKER, 110 EAST 42nd STREET., NEW YORK

Imports of Paper and Paper Stock

(*Continued from page 60*)

E. M. Sargeant & Co., Drottningholm, Gothenburg, 139 bls. dry soda pulp.
Bulkley, Dunton & Co., Carlsholm, 6,050 bls. chemical pulp.

WOOD PULP BOARDS

Lagerlof Trading Co., Stuttgart, Bremen, 867 bls.
Lagerlof Trading Co., Westfalen, Bremen, 1,503 bls.
M. Meyerson, Drottningholm, Gothenburg, 40 bls.

CASEIN

The Kalbfleish Corp., Pan American, Buenos Aires, 1,334 bags.
Bank of America, Thespis, Buenos Aires, 500 bags.
Bank of the Manhattan Co., by same, 834 bags.
Bank of London & South America, by same, 833 bags.

SAN FRANCISCO IMPORTS

WEEK ENDING JANUARY 17, 1925

Frazer & Co., Tsuyama Maru, Yokohama, 240 bls. rags.

PHILADELPHIA IMPORTS

WEEK ENDING JANUARY 17, 1925

M. Rice & Co., Raifuku Maru, Hamburg, 1 cs. crepe paper.
Paper House of Penna., Westfalen, Bremen, 814 rolls news print.
Paper House of Penna., by same, 101 bls. printing paper.
L. H. Abenheimer, by same, 47 bls. rags.
Brown Bros. & Co., by same, 284 bls. rags.
S. Birkenstein & Sons, by same, 118 bls. rags.
Wm. Schall & Co., by same, 35 bls. rags.
Belgian Bank, by same, 113 bls. rags.
E. J. Keller Co., Inc., Raifuku Maru, Hamburg, 69 bls. rags.
D. M. Hicks, by same, 24 bls. rags.
R. Wolf, by same, 44 bls. rags.
Wm. Schall & Co., by same, 204 bls. rags.
D. I. Murphy, by same, 65 bls. rags.
Castle & Overton, Inc., by same, 89 bls. rags.
Castle & Overton, Olen, Bordeaux, 243 bls. rags.
Katzenstein & Keene, Inc., by same, 226 bls. rags.
G. Mathese & Co., Olen, Bordeaux, 74 bls. rags.
E. J. Keller Co., Inc., by same, 447 bls. rags.
E. J. Keller Co., Inc., Olen, St. Nazaire, 489 bls. rags.
A. Hurst & Co., by same, 278 bls. rags.
The Stone Bros. Co., Inc., by same, 16 bls. rags.
Katzenstein & Keene, Inc., by same 542 bls. rags.
Salomon Bros. & Co., by same, 138 bls. rags.
L. H. Abenheimer, Raifuku Maru, Hamburg, 118 bls. rags.
The Stone Bros. Co., Inc., Abron, Naples, 94 bls. rags.
The Stone Bros. Co., Inc., Abron, Leghorn, 265 bls. rags.
Philadelphia National Bank, by same, 178 bls. rags.
Chase National Bank, by same, 116 bls. rags.
D. I. Murphy, Editor, Rotterdam, 264 bls. rags.
Castle & Overton, Inc., by same, 65 bls. rags.
E. J. Keller Co., Inc., by same, 182 bls. rags.
E. J. Keller Co., Inc., Eastern Dawn, Rotterdam, 326 bls. rags.
E. J. Keller Co., Inc., Schodack, Havre, 239 bls. rags.
E. J. Keller Co., Inc., Hornfels, Bremen, 114 bls. rags.
Castle & Overton, Inc., London Mariner, London, 515 bls. rags.
Castle & Overton, Inc., Manchester Hero, Manchester, 439 bls. rags.
Castle & Overton, Inc., Blydendijk, Rotterdam, 375 bls. rags.
Castle & Overton, Bankdale, Barcelona, 86 bls. rags.
Castle & Overton, Cabo Hatteras, Barcelona, 273 bls. rags.
Castle & Overton, Monticello, Hamburg, 286 bls. rags.
Castle & Overton, Inc., ————, Germany, 2,200 bls. wood pulp.
National City Bank, Westfalen, Bremen, 1,500 bls. wood pulp.
E. J. Keller Co., Inc., Editor, Rotterdam, 245 bls. wood pulp, 51 tons.
Bulkley, Dunton & Co., Hornfels, 125 bls. chemical pulp.

BOSTON IMPORTS

WEEK ENDING JANUARY 17, 1925

Wilkinson Bros. & Co., Inc., Raifuku Maru, Hamburg, 77 rolls wrapping paper.
Reis & Co., Raifuku Maru, Hamburg, 46 bls. cotton waste.
Reis & Co., by same, 46 bls. cotton waste.
Atterbury Bros., Inc., by same, 1,933 bls. sulphite pulp, 294 tons.
Bank of America, Thespis, Buenos Aires, 584 bags casein.
Bank of The Manhattan Co., by same, 833 bags casein.
Bulkley, Dunton & Co., Gisla, 300 bls. chemical pulp.
Bulkley, Dunton & Co., Heinrich Arp, 970 bls. chemical pulp.
Bulkley, Dunton & Co., Olson, 950 bls. chemical pulp.
Bulkley, Dunton & Co., Carlsholm, 4,750 bls. chemical pulp.

NEW ORLEANS IMPORTS

WEEK ENDING JAUNARY 17, 1925

Castle & Overton, Inc., West Kasson, Belgium, 538 bls. rags.
Castle & Overton, Inc., Harald, Hamburg, 168 bls. rags.
Castle & Overton, Inc., Missouri, Belgium, 649 bls. rags.
Castle & Overton, Missouri, France, 2,350 bls. rags.
Castle & Overton, by same, 192 bls. waste paper.
Castle & Overton, by same, 147 bls. bagging.
Castle & Overton, Delaware, Sweden, 1,375 bls. wood pulp.

PORTLAND IMPORTS

WEEK ENDING JANUARY 17, 1925

Bulkley, Dunton & Co., Heinrich Arp, 5,282 bls. chemical pulp.
Lagerloef Trading Co., Kolsnaren, 6,638 bls. chemical pulp.

BALTIMORE IMPORTS

WEEK ENDING JANURY 17, 1925

E. J. Keller Co., Inc., Westerwald, Hamburg, 100 bls. rag pulp.
Lagerloef Trading Co., West Maximus, 14,764 bls. chemical pulp.
Bulkley, Dunton & Co., Hornfels, 2,500 bls. chemical pulp.

Spanish River President Gives Banquet

TORONTO, Ontario, January 12, 1925.—At the ninth annual President's Banquet of the Spanish River Pulp and Paper Company, held at Sault Ste. Marie, Ont., recently. Safety and the splendid industrial relations existing between the management and men were some of the outstanding features. George H. Mead, of Dayton, Ohio, president of the company, made the announcement that in a short time the management expected to make it possible for employees to purchase stock and thus become owners in the industries. This news was well received and hearty cheers were given for Mr. Mead. Representatives of the Espanola and Sturgeon Falls mills were also present.

A. P. Costigane, safety engineer of the Ontario Pulp and Paper Makers' Safety Association, presented the company with the Association's shield and flag, the Soo mill having won the honor placed for 1924 with a minimum of accidents in the province.

Col. Thomas Gibson, of Toronto, vice-president; C. H. L. Jones, of Sault Ste Marie, general manager; George R. Gray, director, and P. B. Wilson, vice-president, were among those who delivered interesting and instructive addresses.

Louisville Paper Co. Round Up

LOUISVILLE, Ky., January 10, 1925.—The annual round up of the Louisville Paper Company was held December 29 and 30 and was as usual a very enjoyable affair. The entire country and city sales force attended, forty persons being present. An instructive program was presented during the two days followed by dinner on Monday in the James I room of the Elks Athletic Club and on Tuesday in the Louis XVI room of the Brown Hotel.

In addition to the regular speakers on the program, one of the features of the meeting was an address by Harry C. Spillman, Educational Director of the Remington Typewriter Company.

Another outstanding feature of the program was a very "true to life" playlet entitled "Salesmanship As It Is And Ought To Be."

Blue Prints of Warren Stuff Pumps

In last week's issue of the PAPER TRADE JOURNAL there appeared an advertisement of the Warren Steam Pump Company of Warren, Mass., showing a blue print, illustrating the Warren Stuff Pump. Anyone interested can obtain a blue print 24 x 36 inches of the pump as shown in the advertisement by simply writing for it.

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Market Quotations

Quoted by Hepburn & Co., No. 74 Broadway, N. Y. City, to whom all inquiry for quotations on these or any other Securities is referred.

BONDS	BID	OFFERED
Abitibi Power and Paper, Gen. 6s 1940	99	102*
Advance Bag and Paper, 7s 1943	97	100*
Aroostook Pulp and Paper, 6s 1925	99	...
Bastrop Pulp and Paper, 7½s 1932	98	100*
Brompton Pulp and Paper, 6s 1927	93	95
Beaver Board, 8s 1933	87	89
Bedford Pulp and Paper, 6½s 1942	96	...
Berkshire Hills Paper Co., 8s 1941	...	100
Beaver Board, N. Y. Curb, 8s 1933	87	89
Beaver Products Corp., 7½s 1942	102	104
Belgo Canadian Paper, 6s 1943	98	100
Brown Paper Co., 8s 1931	102	105*
Berlin Mills, 5s 1931	99	...
Bryant Paper Co., 6s 1942	97	100
Brown Company Serial, 6s 1925-43	97	100
Central Paper, 6½s 1925-42	90	95
Cape Breton Pulp and Paper, 6s 1932	100	102
Carthage Sulphite Pulp and Paper, 8s 1941	40	50
Champion Coated Paper Co., 6s 1924-34	...	102
Champion Fibre Co. Notes, 8s 1930	102	...
Cherry River Paper, 5s 1929	97	100*
Chicoutimi Pulp Co., 6s 1942	63	...
Donnacoona Paper Co., Ltd., 6s 1940	98	100
Eddy Paper, 7s 1931	96	...
Eagle Paper, 6½s 1932	96	100
Escanaba Paper, 6s 1933	84	88
Fox River Paper, 7s 1931	100	...
Fort Orange Paper Co, 7s 1942	90	...
Eddy Paper Co., 7½s 1931	95	98
Gilbert Paper Co., 7s 1927	97	...
Gilbert Paper Co., 6½s 1923-29	100	102*
Hammermill Paper Co., 6s 1930-39	98	101
Hummell, Ross Film Corp., 7s 1925	90	...
Jessup & Moore Paper Co., 6s 1939	93	97
Kenmore Pulp and Paper Co., 6s 1937	91	...
Lake Superior Pulp and Paper, 6s 1941	102	...
Mattagami Pulp and Paper, Oct. 7, 1949	30	40
Marinette & Menominee, 7½s 1936	103	105
Mead Pulp and Paper, 7s 1925-29	96	99
Mengel Company, 7s 1934	100	103
National Paper and Type, 6s 1947	96	99*
Oswego Falls Corp., 8s 1942	101	105
Orono Pulp and Paper, 5s 1941	93	96*
Orono Pulp and Paper, 6s 1943	97	100*
Oxford Paper Co., 6s 1947	99	101
Paterson Parchment Paper, 5½s 1927-28	...	100
Paterson Parchment, 6s 1938	96	99
Parker, Young Co., 6½s 1944	92	96
Price Bros. & Co., Ltd., 6s 1943	98	100
Provincial Paper Mills, Ltd., 6s 1940	97	...
Riordan Co., Series A, 8s 1940	90	93
Riordan Pulp and Paper, Ltd., 6s 1929	24	28
River Raisin Paper, 8s 1936	102	105
St. Regis Paper, 6½s, 1929-35	97	102
Smith (Howard) Paper Mills, 7s 1941	90	93
Smith (Howard) Paper Mills, 6s 1934	94	...
St. Croix Paper, 5s 1923-37	95	...
Stevens & Thomson Paper, 6s 1942	86	90
Spanish River Pulp and Paper, 6s 1931	105	...
Spanish River Pulp and Paper, Gen 8s 1941	107	109
Ticonderoga Pulp and Paper Co., 6s, 1940	91	95
Ticonderoga Pulp & Paper 1-5, 1930	85	90
Whittaker Paper, 1st 7s 1942	96	99
Watab Paper Co., 6½s 1942	98	101
Waterway Paper Products, 7s 1924-27	95	100
Wayagamack Pulp and Paper, Ltd., 6s 1951	84	88*

STOCKS	BID	ASKED
Abitibi Power and Paper, Com	62	63
Abitibi Power and Paper, Pfd	98½	103
Advance Bag and Paper, Com	8	12*
Advance Bag and Paper, Pfd	70	75*
Beaver Board, Com	5	8
Beaver Board, Pfd	38	41
Bryant Paper, Cap	12	...
Bryant Paper, Pfd	9	...
Brompton Pulp and Paper, Cap	29	32
Chicago Mill & Lumber Co., Com	63	...
Chicago Mill & Lumber Co., Pfd	98	101
Crown Williamette, Com	93	98*
Crown Williamette, 7% A, Pfd	98	SW
Donnaconna Paper, Pfd	95	100
Great Northern Paper, Cap	220	250
Howard Smith Paper Co., Com	22	23
Howard Smith Paper Co., Pfd	74	76
Jessup & Moore Paper, Pfd	74	78
International Paper Co., Com	50	53
International Paper Co., Pfd	71	73
Mengel Company, Com	30	31½
Mengel Company, Pfd	72*	76
Oxford Paper Co., Pfd	93	95
Provincial Paper Co., Com	90	100
Provincial Paper Co., Pfd	95	98
Price Brothers, Cap	36	38
St. Maurice Paper Co., Cap	83	88
St. Regis Paper Co., Cap	24	27
Smith (Howard) Paper Co., Ltd., Com	...	25
Smith (Howard) Paper Co., Ltd., Pfd	70	...
Spanish River Pulp and Paper, Com	105	110
Spanish River Pulp and Paper, Pfd	120	125
Ticonderoga Pulp and Paper, Cap	145	...
Union Bag and Paper, Cap	48	50
United Paper Board, Cap	52	55*
West Virginia Pulp and Paper, Cap	45	50
West Virginia Pulp & Paper, Pfd	85	...
Whittaker Paper, Com	12	20
Whittaker Paper, Pfd	42	46

*Nominal.

Paper

(F. o. b. Mill)

Ledgers	11.00	@38.00
Bonds	9.00	@45.00
Writings—		
Extra Superfine	14.00	@30.00
Superfine	14.00	@30.00
Tub Sized	10.00	@15.00
Engine Sized	8.00	@11.00
News—		
Rolls, contract	3.50	@ 3.90
Rolls, transit	3.75	@ 4.25
Sheets	4.00	@ 4.25
Side Runs	3.25	@ 4.00
Book, Cased—		
S. & S. C.	7.00	@ 9.75
M. F.	6.50	@ 8.75
Coated and Enamel	9.00	@15.00
Lithograph	9.00	@14.00
Tissues—		
White No. 1	.70	@ .90
White No. 2	.70	@ .80
Colored	.95	@ 1.90
Anti-Tarnish	1.40	@ 2.30
Kraft	.90	@ 1.00
Manila	.75	@ .80
Kraft—		
No. 1 Domestic	5.50	@ 6.25
No. 2 Domestic	5.00	@ 5.50
Imported	5.50	@ 5.75
Manila—		
No. 1 Jute	9.00	@
No. 2 Jute	7.75	@ 8.50
No. 1 Wood	4.75	@ 5.25
No. 2 Wood	4.00	@ 4.50
Butchers	3.75	@ 4.00
Fibre Papers—		
No. 1 Fibre	5.50	@ 6.00
No. 2 Fibre	4.75	@ 5.25
Common Bogus	2.50	@ 2.75
S. Screening	3.25	@ 3.75
Card Middler	4.00	@ 5.00
Boards—per ton—		
News	45.00	@47.50
Straw	50.00	@55.00
Chip	42.50	@45.00
Binders' Boards	75.00	@80.00
Sgl. Mla. Ll. Chip	55.00	@62.50
Wood Pulp	70.00	@75.00
Container	62.50	@67.50
Sulphate Screenings—		
Coarse	.80	@ .90
Refined	1.75	@ 2.00
Ground Wood—		
Screenings	20.00	@25.00
Glassine—		
Bleached, basis 25 lbs.	12.00	@15.00
Bleached, basis 20 lbs.	14.00	@17.00

Mechanical Pulp

(Ex-Dock)

No. 1 Imported	32.00	@38.00

(F. o. b. Mill)

No. 1 Domestic	30.00	@35.00

Chemical Pulp

(Ex-Dock, Atlantic Ports)

Sulphite (Imported)—		
Bleached	3.85	@ 4.50
Easy Bleaching	2.90	@ 3.20
No. 1 strong unbleached	2.75	@ 3.25
No. 2 strong unbleached	2.50	@ 2.75
No. 1 Kraft	2.75	@ 3.00
Sulphate—		
Bleached	3.50	@ 3.65

(F. o. b. Pulp Mill)

Sulphite (Domestic)—		
Bleached	3.75	@ 4.50
Easy Bleaching Sulphite	2.75	@ 3.25
News Sulphite	2.45	@ 2.75
Mitscherlich	3.00	@ 3.50
Kraft (Domestic)	2.70	@ 3.50
Soda Bleached	3.90	@ 4.10

Domestic Rags

New Rags

Prices to Mill, f. o. b. N. Y.

Shirt Cuttings—		
New White, No. 1	15.00	@16.00
New White, No. 2	9.50	@11.00
Silesias No. 1	10.50	@11.50
New Unbleached	13.50	@14.50
Washables	6.50	@ 9.25
Fancy	10.00	@10.50
Blue Overall	10.50	@11.50
New Blue Prints	7.50	@ 8.50
New Soft Blacks	5.75	@ 6.20
Mixed Khaki Cuttings	5.50	@ 6.00
Pink Corset Cuttings	10.50	@11.00
Pink Muslin	10.25	@10.75
New Light Seconds	3.25	@ 3.50
O. D. Khaki Cuttings	6.00	@ 7.00
Men's Corduroy	6.00	@ 6.75
New Mixed Blacks	4.00	@ 5.00

Old Rags

White, No. 1—		
Repacked	8.00	@ 9.00
Miscellaneous	6.50	@ 7.00
White, No. 2—		
Repacked	4.75	@ 5.25
Miscellaneous	4.00	@ 4.50
St. Soiled, White	3.25	@ 3.75
Thirds and Blues—		
Repacked	4.25	@ 4.50
Miscellaneous	3.25	@ 3.50
Black Stockings	4.00	@ 4.50
Roofing Rags—		
Cloth Strippings	3.15	@ 3.25
No. 1	3.15	@ 3.25
No. 2	3.05	@ 3.15
No. 3	2.00	@ 2.25
No. 4	2.75	@ 2.85
No. 5A	1.80	@1.50

Foreign Rags

New Light Silesias	9.50	@10.50
Light Flannelettes	11.00	@12.00
Unbl'chd Cottons	13.00	@14.00
New White Cuttings	14.00	@15.00
New Light Oxfords	10.00	@11.00
New Light Prints	9.00	@10.00
New Mixed Cuttings	4.25	@ 4.75
New Dark Cuttings	3.75	@ 4.25
No. 1 White Linens	10.50	@11.50
No. 2 White Linens	7.50	@ 8.50
No. 3 White Linens	6.00	@ 6.50
No. 4 White Linens	4.50	@ 5.50
Old Extra Light Prints	4.75	@ 5.50
Ord. Light Prints	4.25	@ 4.75
Med. Light Prints	3.75	@ 4.25
Dutch Blue Cottons	4.50	@ 5.00
Ger. Blue Cottons	4.25	@ 4.50
Ger. Blue Linens	4.50	@ 5.00
Checks and Blues	3.75	@ 4.00
Linsay Garments	3.25	@ 3.50
Dark Cottons	3.20	@ 3.35
Shoppery	3.05	@ 3.15
French Blues	4.25	@ 4.75

Bagging

Prices to Mill F. o. b. N. Y.

Gunny No. 1—		
Foreign	3.15	@ 3.30
Domestic	3.25	@ 3.40
Wool, Tares, light	3.00	@ 3.10
Wood, Tares, heavy	3.10	@ 3.20
Bright Bagging	2.90	@ 3.05
Mixed Bagging	2.40	@ 2.50
Sound Bagging	2.50	@ 2.75
Roofing Bagging	2.30	@ 2.40
Manila Rope—		
Foreign	6.50	@ 7.00
Domestic	6.50	@ 7.00
New Bu. Cut	3.50	@ 4.00
Hessian Jute Threads—		
Foreign	4.00	@ 4.25
Domestic	3.25	@ 3.50

Old Waste Papers

(F. o. b. New York)

Shavings—		
Hard, White, No. 1	3.60	@ 3.90
Hard, White, No. 2	3.25	@ 3.50
Soft, White, No. 1	3.00	@ 3.10
Flat Stock—		
Stitchless	1.45	@ 1.55
Overissue Mag	1.45	@ 1.55
Solid Flat Book	1.40	@ 1.50
Crumpled No. 1	1.25	@ 1.35
Solid Book Ledger	1.80	@ 1.90
Ledger Stock	1.60	@ 1.70
New B. B. Chips	.65	@ .75
Manilas—		
New Env. Cut	2.45	@ 2.60
New Cut. No. 1	1.75	@ 2.00
Extra No. 1 old	1.40	@ 1.50
Print	1.20	@ 1.30
Container Board	1.00	@ 1.10
Bogus Wrapper	1.00	@ 1.10
Old Krafts Machine compressed bales	2.05	@ 2.15
News—		
No. 1 White News	1.95	@ 2.10
Strictly Overissue	1.05	@ 1.15
Strictly Folded	.95	@ 1.05
No. 1 Mixed Paper	.65	@ .75
Common Paper	.45	@ .55

Twines

Cotton—(F. o. b. Mill)—		
No. 1	.43	@ .48
No. 2	.41	@ .43
No. 3	.40	@ .42
India, No. 6 basis—		
Light	.19	@ .20
Dark	.17	@ .19
B. C., 18 basis	.39	@ .41
A. B. Italian, 18 Basis	.51	@ .51

Finished Jute—			
Dark, 18 basis...	.30	@	.31
Light, 18 basis...	.28	@	.30
Jute Wrapping, 3-6 Ply—			
No. 1	.20	@	.23
No. 2	.18	@	.20
Tube Rope—			
4-ply and larger.	.15	@	.17
Fine Tube Yarn—			
5-ply and larger.	.20	@	.28
4-ply	.21	@	.24
3-ply	.22	@	.25
Unfinished India—			
Basis	.14	@	.15
Paper Makers' Twine			
Balls	.12	@	.13
Box Twine, 2-3 ply	.14	@	.15
Jute Rope	.20	@	.40
Amer. Hemp, 6....	.30	@	.32
Sisal Hay Rope—			
No. 1 Basis.....	.14	@	.16
No. 2 Basis.....	.10	@	.12
Sisal Lath Yarn—			
No. 1	.14	@	.15
No. 2	.11	@	.13
Manila Rope	.18	@	.19

CHICAGO

Paper

F. o. b. Mill

All Rag Bond.....	35	@	40
No. 1 Rag Bond..	25	@	35
No. 2 Rag Bond..	14	@	25
Water Marked Sulphite	9	@	12
Sulphite Bond.....	7	@	10¼
Sulphite Ledger ...	9½	@	12
Superfine Writing..	18	@	24
No. 1 Fine Writing	14	@	18
No. 2 Fine Writing	12	@	14
No. 3 Fine Writing	9	@	12
No. 1 M. F. Book..	5½	@	7½
No. 1 S. & S. C. Book	6½	@	7¼
Coated Book	8	@	10
Coated Label	8	@	10
News—Rolls, mill—	3½	@	4½
News—Sheets, mill.	3¾	@	4¾
No. 1 Manila.....	4½	@	5½
No. 1 Fibre.....	4½	@	5¼
No. 2 Manila.....	3¾	@	4¼
Butchers' Manila...	4	@	4½
No. 1 Kraft.....	5¾	@	6¼
No. 2 Kraft.....	5.25	@	5.50
Wood Tag Boards..	4¼	@	6
Sulphite Screenings.	3.00	@	3.25
Manila Tissue, 24x36 sheet	7½	@	8
White Tissue, 20x30 sheet	7	@	7¼
Boards, per ton—			
Plain Chip 50.00		@52.50	
Solid News.....52.50		@55.00	
Manila Line Chip 62.50		@65.00	

Container Lined—			
85 Test 72.50		@75.00	
100 Test 77.50		@80.00	

Old Papers

F. o. b. Chicago

Shavings—			
No. 1 Hard White	3.50	@	3.60
White Envel. Cuttings	3.50	@	3.60
No. 1 Soft Shav.	3.25	@	3.35
No. 1 Mixed....	1.90	@	1.95
No. 2 Mixed....	1.75	@	1.80
Ledger and Writings	1.65	@	1.70
Solid Books.....	1.55	@	1.60
No. 1 Light Books.	1.20	@	1.25
Blanks	2.15	@	2.25
Manila Envelope Cuttings.....	2.65	@	—
Ex. No. 1 Manila..	2.15	@	2.25
Print Manila.....	1.25	@	1.40
Folded News (overissue)	1.15	@	1.20
Old Newspapers—			
No. 1	1.05	@	1.10
No. 2	.90	@	.95
Mixed Papers—			
No. 1	1.00	@	1.05
No. 2	.85	@	.90
Straw Clippings...	.95	@	—
Binders' Clippings..	.90	@	—
Kraft	2.35	@	2.40
New Kraft Cuts..	2.60	@	2.70
Roofing Stock, f. o. b. Chicago, Net Cash—			
No. 1.....53.00		@	—
No. 2.....51.00		@	—
No. 3.....49.00		@	—
No. 4.....43.00		@	—

BOSTON

Paper

Ledgers—			
Sulphite	.08½	@	.18
Rag Content	.18	@	.36½
All Rag	.38	@	.50
Bonds—			
Sulphite	.07½	@	.14
Rag Content	.16	@	.33½
All Rag	.36½	@	.51
Writings	.08½	@	.20
Superfines	.20	@	.48
News	.04	@	.06½
Book, M. F.	.06¼	@	.10¾
Book, Super	.07½	@	.11
Book, Coated	.09½	@	.20
Coated Litho.	.10	@	.15
Label	.09½	@	.15
Jute Manila No. 1.	.12	@	.13
Manila, Sul. No. 1.	.05	@	.06
Manila, Sul. No. 2.	.03¾	@	.04¼
No. 1 Kraft	.06½	@	.06½
No. 2 Kraft	.05¾	@	.05½
Common Bogus	.03½	@	.04
Straw Board 50.00		@55.00	
News Board 45.00		@47.50	
Chip Board 42.50		@45.00	
Single Manila Pulp lined board 57.50		@60.00	
Single White, patent coated board 75.00		@85.00	
Wood Pulp Board..80.00		@85.00	
Binder Boards 75.00		@85.00	
Tarred Felts—			
Regular 61.00		@63.00	
Slaters 66.00		@68.00	
Best Tarred, 1 Ply, roll	1.50	@	1.60
Best Tarred, 2 Ply, roll	1.70	@	1.80
Best Tarred, 3 Ply, roll	2.00	@	2.10

Old Papers

Shavings—			
No. 1 Hard White	4.00	@	4.25
White Blank News.	1.75	@	2.00
Manila Env. Cuttings	2.80	@	3.00
No. 2 Hard White	3.25	@	3.50
No. 1 Soft White..	3.10	@	3.25
No. 2 Soft White..	2.25	@	2.50
No. 1 Mixed.....	1.60	@	1.75
No. 2 Mixed.....	1.25	@	1.50
Solid Ledger Stock.	2.00	@	2.25
Writing Paper	—	@	1.70
No. 1 Books, Heavy	1.60	@	1.80
No. 1 Books, Light	1.40	@	1.50
No. 1 New Manila.	2.50	@	2.60
No. 1 Old Manila.	1.75	@	2.00
Print Manila	1.05	@	1.20
Old Kraft	2.00	@	2.25
Overissue News ...	1.00	@	1.20
Old Newspapers ...	.90	@	1.00
No. 1 Mixed Paper..	.60	@	.65
Box Board, Chip....	.60	@	.65

Bagging

Price f. o. b. Boston

Gunny No. 1—			
Foreign	1.12½	@	2.00
Domestic	2.00	@	2.12½
Manila Rope	6.00	@	6.50
Mixed Rope	1.50	@	1.62½
Scrap Burlaps ...	1.25	@	1.50
Wool Tares, heavy.	2.00	@	2.13
Mixed Strings ...	1.50	@	1.62½
New Burlap Cuttings	2.00	@	2.25

Domestic Rags (New)

Price f. o. b. Boston

Shirt Cuttings—			
New White No. 1	.13½	@	.14
Silesias, No. 1...	.09	@	.09½
New Unbleached.	.12½	@	.13
Washable	.06	@	.06½
Fancy	.07	@	.07¼
Cottons — according to grades, Blue Overall	.09½	@	.10
New Blue	.05½	@	.06
New Black, soft...	.06	@	.06¼
Khaki Cuttings	.05½	@	.06
Corduroy	.04	@	.04½
New Canvas	.10½	@	.11

Domestic Rags (Old)

Price f. o. b. Boston

White No. 1—			
Repacked	7.50	@	8.00
Miscellaneous ...	6.50	@	7.00
White No. 2—			
Repacked	5.50	@	6.00
Miscellaneous ...	4.75	@	5.50
Thirds and Blues—			
Repacked	3.75	@	4.00
Miscellaneous	3.00	@	3.25
Roofing Stock—			
No. 1	2.25	@	2.37
No. 2	2.12½	@	2.25
No. 3	1.50	@	1.75
No. 4	1.15	@	1.20

PHILADELPHIA

Paper

Bonds	.09	@	.53
Ledgers	.13½	@	.40
Writings—			
Superfine	.13½	@	.20
Extra fine	.12	@	.22
Fine	.20	@	.26½
Fine, No. 2.....	.16	@	.25
Fine, No. 3.....	.12	@	.20
Book, M. F.....	.08	@	.11
Book, S. S. & C...	.09¼	@	.12½
Book, Coated	.11½	@	.20
Coated Lithograph..	.10	@	.13
Label	.10	@	.13
News	.04¼	@	.05
No. 1 Jute Manila.	.12	@	.13
Manila Sul., No. 1.	.07	@	.10
Manila No. 2.....	.06	@	.08
No. 2 Kraft.....	.05	@	.08
No. 1 Kraft.....	.07	@	.08
Common Bogus	.03½	@	.04
Straw Board 55.00		@60.00	
News Board 45.00		@47.50	
Chip Board.....45.00		@47.50	
Wood Pulp Board.. 2.75 (Carload Lots)		@	3.00
Binder Boards—			
Per ton 60.00		@65.00	
Carload lots.....55.00		@60.00	
Tarred Felts—			
Regular 61.00		@63.00	
Slaters 66.00		@68.00	
Best Tarred, 1-ply (per roll)	1.70	@	1.80
Best Tarred, 2-ply (per roll)	1.50	@	1.60
Best Tarred, 3-ply.	2.00	@	2.10

Bagging

F. o. b. Phila.

Gunny, No. 1—			
Foreign	1.75	@	1.85
Domestic	1.65	@	1.70
Manila Rope....	5.75	@	6.00
Sisal Rope	2.50	@	—
Mixed Rope	1.25	@	—
Scrap Burlaps...	1.65	@	1.70
Wool Tares, heavy.	2.00	@	2.13
Mixed Strings ...	1.00	@	—
No. 1, New Lt. Burlap	3.50	@	3.75
New Burlap Cuttings	3.75	@	—

Old Papers

F. o. b. Phila.

Shavings—			
No. 1 Hard White	3.65	@	3.70
No. 2 Hard White	3.25	@	3.40
No. 1 Soft White	2.90	@	3.00
No. 2 Soft White	2.05	@	2.25
No. 1 Mixed.....	1.75	@	—
No. 2 Mixed.....	1.25	@	1.30
Solid Ledger Stock.	1.75	@	1.90
Writing Paper	1.50	@	1.75
No. 1 Books, heavy.	1.50	@	1.60
No. 2 Books, light.	1.15	@	1.25
No. 1 New Manila.	2.40	@	2.50
No. 1 Old Manila..	1.50	@	1.75
Container Manila..	1.15	@	1.20
Old Kraft	2.00	@	2.25
Overissue News ...	1.05	@	1.10
Old Newspaper.....	.75	@	.80
No. 1 Mixed Paper.	.75	@	.80
Common Paper	.60	@	.70
Straw Board, Chip.	.65	@	.70
Binders Bd., Chip..	.75	@	.80

Domestic Rags—New.
Price to Mill, f. o. b. Phila.

Shirt Cuttings—			
New White, No. 1	.13	@	.14
New White, No. 2	.07½	@	—
Silesias, No. 1...	.08	@	.08½
New Unbleached.	.12	@	.13½
Washable	.05½	@	.05¾
Fancy	.07	@	.07¾
Cottons—according to grades—			
Blue Overall	.08¾	@	.09
New Blue	.04	@	
New Black Soft.	.06	@	.06¾
New Light Seconds	.03½	@	.03¾
Khaki Cuttings...	.05½	@	.06
Corduroy	.04	@	.04½
New Canvas	.09	@	.09½
New Black Mixed	.05	@	.05¼

Old

White, No. 1—			
Repacked	7.00	@	7.25
Miscellaneous ...	6.25	@	6.50
White, No. 2—			
Repacked	.05½	@	.05¾
Miscellaneous	.05	@	.05¼
Thirds and Blues—			
Repacked	3.40	@	3.60
Miscellaneous	3.15	@	3.25
Black Stockings..	4.00	@	4.25
Roofing Stock—			
No. 1	2.25	@	2.35
No. 2	2.15	@	2.25
No. 3	1.20	@	1.30
No. 4	2.10	@	2.20
No. 5A	1.40	@	—
B	1.25		nominal
C	1.15		nominal

TORONTO

Paper

(Mill Prices to Jobbers f. o. b. Mill)

Bond—			
Sulphite	.11½	@	.12½
Light tinted.....	.12½	@	.13½
Dark tinted.....	.14	@	.15
Ledgers (sulphite)..	—	@	.13
Ledgers, No. 1.....	34	@	
Ledgers No. 2.....	26	@	
Writing	.09½	@	
Writing S. C.....	.10	@	
News, f. o. b. Mills—			
Rolls (carloads)..	3.65	@	—
Sheets (carloads).	—	@	4.50
Sheets (2 tons or over)	—	@	4.75
Book—			
No. 1 M. F. (carloads)	8.25	@	—
No. 2 M. F. (carloads)	7.95	@	—
No. 3 M. F. (carloads)	7.25	@	—
No. 1 S. C. (carloads)	8.75	@	—
No. 2 S. C. (carloads	8.25	@	—
No. 3 S. C. (carloads)	7.75	@	—
No. 1 Coated and litho 14.50		@	—
No. 2 Coated and litho 13.50		@	—
No. 3 Coated and litho 12.75		@	—
Coated tinted.....	.15	@	—
Wrapping—			
Rag Brown	4.75	@	—
White Rag	5.25	@	—
"B" Manila	5.50	@	—
No. 1 Manila....	6.50	@	—
Fiber	6.50	@	—
Kraft, M. F.....	7.00	@	—
M. G.	7.15	@	—

Pulp

(F. o. b. Mill)

Ground wood.....	30.00	@	33.00
Sulphite easy bleaching	62.50	@	65.00
Sulphite news grade	50.00	@	55.00
Sulphite, bleached.	78.00	@	—
Sulphate	65.00	@	67.50

Old Waste Paper

(In carload lots, f. o. b. Toronto)

Shavings—			
White Env. Cut..	3.60	@	—
Soft White Book shavings	3.25	@	—
White Blk, News	1.90	@	—
Book and Ledger—			
Flat Magazine and Book Stock (old)	1.50	@	—
Light and Crumpled Book Stock	1.35	@	—
Ledgers and Writings	1.75	@	—
Solid Ledgers....	1.75	@	—
Manilas—			
New Manila Cut.	—	@	1.70
Printed Manilaa..	1.20	@	—
Kraft	2.15	@	—
News and Scrap—			
Strictly Overissue	1.00	@	—
Folded News	1.00	@	—
No. 1 Mixed Papers	.75	@	—

Domestic Rags—
Price to mills, f. o. b. Toronto

	Per lb.		
No. 1 White shirt cuttings	.15	@	.15¼
No. 2 White shirt cuttings	.07½	@	.08
Fancy shirt cuttings	.09¼	@	.10
No. 1 Old Whites.	—	@	—
Third and blues...	.05½	@	.05¾

New York Market Review

OFFICE OF THE PAPER TRADE JOURNAL,
Wednesday, January 21, 1925.

No changes of great importance have occurred in the paper market during the past week. Representative paper mill men and paper dealers admit that business is not up to what it was expected to be at this time, but state that the oulook is gradually becoming more encouraging and that there should be considerable more activity in the next two or three weeks. Prices all along the line are firm with advances, in fact, more likely than downward revisions. Business generally, judging from current reports, is improving more rapidly than in the paper line and it is believed that this activity elsewhere cannot fail to be reflected soon in paper lines.

News print as for a long time past continued to be the most active feature of the market. Demand is somewhat better than it has been and gives promise of continuously improving during the next few months.

Book papers also are in good demand with prospects of continuing so. Fine papers are selling actively with prices firm and tending upward. Tissues, also, are in fairly good request with an encouraging outlook. Demand, naturally, has fallen off somewhat for this variety of paper since the holidays, but business is reported as fairly satisfactory by leading factors in the market.

Board of all variety is in fairly active request with the basic conditions of this department of the market in better condition probably than it has been for sometime. Board men expect a gradual improvement from now on.

Mechanical and Chemical Pulp

The market for mechanical pulp is firm and the tone of the market generally healthy. Grinding conditions just now are not favorable and this fact will, of course, have a tendency to cause prices to remain firm. The chemical pulp market is constantly improving. Demand is good with prices firm and fewer concessions are being made now than was the case a short time ago.

Rags, Old Rope and Bagging

The rag market is gradually recovering from the quietude usually caused by the inventory period. Some fairly good orders are reported and it is believed that conditions soon will be back to normal again. Prices continue firm and without any changes of importance. While the demand for old rope is somewhat quiet, prices continue firm. The request for old bagging is fairly satisfactory with prices unchanged, but with the price tendency, in an upward direction.

Waste Paper

Although there are a consderable number of inquiries for waste paper in the market, these have not materialized recently in any great amount of business. An improvement in the market, however is looked for before long.

Twine

The demand for twine is rather slow, as it has been for several weeks past, with prices unchanged from the basis of a number of weeks past.

VIEWS ON CANADIAN EMBARGO

(*Continued from page 28*)

4 p. m.—Sulphite pulp section, Association rooms.

6:30 p. m.—Dinner given by the president in the Ball Room of the Ritz-Carlton, preceded by a reception in the Vice-Regal suite.

Laurentide's New Financing

The Laurentide Power Company, a subsidiary of the Laurentide Company, paper manufacturers, is holding a special general meeting of shareholders on January 23, to consider the issue of $2,000,000 general mortgage sinking fund gold bonds. The purpose of the issue is to redeem the present outstanding 7 per cent bonds which amount to $1,454,000 and to use the balance for plant extensions.

More Merger Talk

There has been a good deal of activity in the stocks of the Abitibi and the Spanish River companies consequent on the rumors of a merger between these two companies. The gossip has even gone so far as to state the terms of the merger but there is considerable scepticism in the matter, despite the assurance that is noticeable in newspaper talk.

Fraser Companies' Newspaper Plant

A dispatch from Edmunston, N. B., says: "More formalities have recently been completed in connection with the project of the Fraser Companies, Limited, to erect a big paper plant at Madawaska, Maine, across the St. John River from here, and it is belicved that everything is in readiness for actual work to be commenced in the early spring.

"One of the latest events in connection with the preparation has been for the town of Madawaska to sell the old ferry approach road on the Maine side of the river to the Fraser Companies for the nominal price of $1. The agreement provides that unless the Frasers build a paper mill at Madawaska within five years, the property shall revert to the town again.

"It is stated that no United States interests are linked up with the Frasers in the project, although the Bangor and Aroostook Railway Company have been active in the matter as a traffic-producing proposition. The lands which have been purchased on the Maine side of the river have all been bought by the Bangor Investment Company, which is the holding corporation which handles the Bangor and Aroostook Railway's real estate matters. Wingate Cram, of Bangor, is treasurer of the companies, and E. Michaud, of Fort Kent, Maine, has been acting as his agent in the purchases."

Allied Paper Mills to Make Change in Common Stock

[FROM OUR REGULAR CORRESPONDENT.]

KALAMAZOO, Mich., January 19, 1925.—A proposal to change the capital stock structure of the Allied Paper Mills will be presented to the stockholders at the annual meeting, called by George S. Davis, secretary, for 10:00 Wednesday morning, January 28, in the Chamber of Commerce rooms.

The proposition, which according to A. G. Gilman president, has the unanimous approval of all directors, authorizes the issuance of 400,000 shares of common stock of the par value of $10 a share, into which the present stock of no par value may be converted on the basis of four shares of stock of no par for one share of stock of par value. Provision will be made that all voting rights, privileges and immunities shall be shared by the common stock with par value and that without par value in the same proportion.

In addressing the stockholders, President Gilman says: "The principal reason or this change is the excessive cost of transferring stock without par value when sold. This burden falls on the seller of the stock and tends to depress its value."

The present capital of the Allied Paper Mills includes 5,000,000 shares of no par value common authorized. The proposed issue of par value common stock will take care of the no par common now subscribed and outstanding. There is in addition outstanding $2,300,000 of preferred stock, 6 per cent cumulative. The preferred issue is not effected by the proposed capital change.

The Allied Paper Mills is closing a very satisfactory year according to President Gilman, who in his pre-annual meeting letter says: "I am pleased to advise you that the results of the past year have justified the policy of the management in the large expenditures for improvements to the various properties owned by the company. While much remains to be done, we show a substantial profit during 1924 instead of losses as heretofore reported, and I feel confident that this progress will continue."

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Miscellaneous Markets

OFFICE OF THE PAPER TRADE JOURNAL,
WEDNESDAY, January 21, 1925.

The chemical market has taken on a most encouraging outlook since a week ago. The past week has witnessed a general betterment, commodities which were sluggish are developing new energy while those which have been answering a reasonably good demand are now enjoying a still better one. As a result a new spirit of optimism is taking possession of the market and it seems almost certain that the prediction made a month ago would be fulfilled and that chemicals would be in the best shape by February 1, that they have been for a long time. No change in prices were noted during the week and all quotations are holding firm. Fewer concessions are being made today than was the case a week ago and, while competition is still keen, there is no longer a disposition evident anywhere to secure business at any price. More future buying is materializing. The market is unusually clear of stock accumulations and consumers who are still dodging the buying point will be forced to release their orders more liberally from now on. Everything taken into consideration the market has a decidedly favorable upward look to it just now and there seems no likelihood that any upset will occur to disturb the promising outlook.

BLANC FIXE.—While blanc fixe is not yet entertaining the demand that it should have, it did undergo a slight improvement the past week and indications are that it has started on an upward course. There are many orders which have been pending for some time and this business is expected to come through soon. The powder is quoted at from $75 to $80 a ton and the pulp at from $55 to $60.

BLEACHING POWDER.—Bleach has made a decided improvement and is now coming in for fairly good business although dissatisfaction over the price is still having a tendency to check some of the business that might otherwise be placed. There is, however, at this writing, more liberal buying to replace the hand-to-mouth buying which had prevailed for some time past. Bleaching powder still sells at from 1.90 to 2.15 cents a pound.

CAUSTIC SODA.—The demand for caustic soda during the week was even better than it has been and the consumers are now contracting liberally for their future requirements. It is quoted at from 3.10 to 3.15 cents a pound.

CASEIN.—Casein continues doing fairly well but the week brought no material change. With the general prevailing conditions it is expected to show more action soon. It is selling at from 10 to 11 cents a pound.

CHINA CLAY.—China clay had a good week and at this writing is having a splendid demand. The British Exchange has gone up and is now near par. With the rise of prices exporters are now bringing in China clay on the basis of the British Exchange and this should help China clay business materially. The imported grades are still quoted at from $16 to $20 a ton and the domestic grades at from $12 to $15.

CHLORINE.—While chlorine did not leap ahead as fast as some of the commodities its demand did show some improvement during the week and it is fully expected that consumers who have delayed about renewing their contracts will come forward soon and give the chlorine market new stimulation. The price is from 4.50 to 7.00 cents a pound in tanks.

ROSIN.—The rosin demand is fair but has undergone no recent change. The price is from $6.00 to $6.25.

SALT CAKE.—Salt cake which has been lamentably quiet is picking up a little, having had a better week than for some time. The manufacturers are practically cleaned up on stocks and are selling ahead at this time for future production. It is quoted at from $17 to $20 a ton.

SODA ASH.—Another good week was recorded by soda ash. More contracts are being renewed and consumers are buying, in many instances, far into the future. The price is 1.38 cents a pound on a flat basis at the works.

SULPHATE OF ALUMINA.—Sulphate of alumina which has been doing excellently all along continues answering a good demand and, if anything, is improving. Good business is being placed daily and consumers are placing their orders without seeking concessions. In fact the freedom from concession-making has helped give the sulphate of alumina market the healthy tone it now enjoys. The price is from 1.40 to 1.45 cents a pound for the commercial grade at the Eastern works and from 2.20 to 2.35 cents a pound for the iron free.

SULPHUR.—The sulphur demand is fair, buyers taking out their contract supplies at stated intervals. The price still stands at from from $18 to $19 a ton.

TALC.—Talc keeps along in a fairly active state and the price continues to hold at from $16 to $17 a ton.

PHILADELPHIA SHOWS BETTERMENT

(*Continued from page 29*)

pany has made die wiping papers one of its standard products. Heretofore Mr. Garrett, one of the best informed men in the trade on paper generally and for many years associated with the industry both in the manufacturing and distribution end of the business has confined his business to the larger field of krafts, corrugated products, manilas and fibre warppings and other coarse products. Miss Agnes Garrett, daughter of the proprietor of the Garrett company was highly honored and applauded by the audience and musical critics of the Press when she made her debut on the Concert stage before the Browning Society of Philadelphia during the last week.

Creditors of Ernest G. Snow To Meet

Creditors of the Ernest G. Snow Company, manufacturer of paper napkins, towels and other kindred products will meet on January 27 in the offices of the referee in the Bankrutpcy proceedings, Walter C. Douglas, in Room 1318 Jefferson Building, 1015 Chestnut street. Among the creditors are the J. L. N. Smythe Company, Alfred G. Walker and A. W. Webb. This will be the first meeting to be held since the filing of the bankruptcy petition in mid December.

Fire At Paper Company Mill

The pulp mill plant of the Harpers Ferry Paper Company, whose main offices are located at West Chester, Penn., was destroyed by fire last Thursday. The loss to the pulp mill property at Harpers Ferry, W. Va., is estimated at $300,000. It is believed that the fire originated from a spark from the boiler room which fell upon the wooden structure covering the main building. The Harpers Ferry Company is the holding company for the Potomac Pulp Mill and Harpers Ferry Electric and Power Company.

Fort Worth to Have Large Paper Box Factory

[FROM OUR REGULAR CORRESPONDENT.]

FORT WORTH, Tex., January 19, 1925.—A paper box factory for Fort Worth that will be three times as large as any similar factory in Texas is being organized here and its incorporation at $100,000 is practically assured as a result of a meeting at The Texas Monday on call of Roscoe Ady, industrial commissioner of the Chamber of Commerce.

One-half the proposed capitalization of $100,000 has been subscribed, Ady announced Wednesday. The plant will employ between 75 and 100 workers.

A large local consumption of the output of the factory is already pledged. A site has not been selected for the proposed plant, Ady said.

The factory will turn out all kinds of paper box goods. The output will range from the large boxes used by cleaners, laundries and dry goods stores to the small boxes used for medicines, Ady said. The annual consumption of paper boxes in Fort Worth was given by Ady as approximately $30,000,000.